VDOİHİ

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

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İsmail YILMAZ

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VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık Cilt 2.3.3.3.7.1.1.193

İsmail YILMAZ

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

Dili: Türkçe + Matematik Mantık

Türkiye Cumhuriyeti Devleti
Kuruluşunun
100.Yılı Anısına

M. Atatürk

DÜZELTME

Bu cilt için

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

simgesi yerine

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

simgesi olmalı.

d

Yazar Hakkında

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

VDOİHİ

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

VDOİHİ'de Olasılık;

- ✓ Makinaların insan gibi düşünebilmesini, karar verebilmesini ve davranabilmesini sağlayacak gerçek yapay zekayla ilişkilendirilmiştir.
- ✓ Dillerin matematik yapısı olduğu gösterilmiştir.
- ✓ Tüm tabanlarda, tüm dağılım türlerinde ve istenildiğinde dağılım türü ve tabanı değiştirerek çalışabilecek elektronik teknolojisinin temelidir.
- ✓ Teorik kabullerle genetikle ilişkilendirilmiştir.
- ✓ Bilgi merkezli değerlendirme yöntemidir.

Sanırım bilgi ve teknolojideki kaderimiz veriyle ilişkilendirilmiş.

f

İÇİNDEKİLER

Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Dağılımlar 1
Simetriden Seçilen Dört Duruma Göre Tek Kalan Düzgün Olmayan Simetrik O... 3
Dizin 6

GÜLDÜNYA

Simge ve Kısaltmalar

n: olay sayısı

$\boldsymbol{n}$: bağımlı olay sayısı

$\mathbb{m}$: bağımsız olay sayısı

$\imath$: bağımsız durum sayısı

I: simetrinin bağımsız durum sayısı

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

D: bağımlı durum sayısı

D_i: olayın durum sayısı

s: simetrinin bağımlı durum sayısı

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

m: olasılık

M: olasılık dağılım sayısı

U: uyum eşitliği

u: uyum derecesi

s_i: olasılık dağılımı

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

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

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

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

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simetrinin durumuna bağlı tek kalan düzgün olmayan simetrik olasılık

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

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E2

BAĞIMLI ve BİR BAĞIMSIZ OLASILIKLI FARKLI DİZİLİMSİZ DAĞILIMLAR

Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Dağılımlar

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

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

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

GÜDÜMYA

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

Farklı dizilimsiz dağılımlarda simetrinin durumlarının olasılık dağılımındaki sıra[illegible] simetrik olasılıkları etkilediğinden, bu bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımları da etkiler. Bu nedenle bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda, simetrinin durumlarının bulunabileceği olaylara göre simetrik olasılık eşitlikleri, simetrinin durumlarının olasılık dağılımındaki sıralamalarına göre ayrı ayrı verilecektir. Bu eşitliklerin elde edilmesinde bağımlı olasılıklı farklı dizilimsiz dağılımlarda simetrinin durumların bulunabileceği olaylara göre çıkarılan eşitlikler kullanılmaktır. Bu eşitlikler, bir bağımlı ve bir bağımsız olasılıklı dağılımlar için VDO Dİ Cilt 1'de çıkarılan eşitliklerle birleştirilerek, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlar için yeni eşitlikleri elde edilecektir. Eşitlikleri adlandırılmasında bir bağımlı olasılıklı farklı dizilimsiz dağılımlarda kullanılan adlandırmalar kullanılacaktır. Bu adların yanına simetrinin bağımlı ve bağımsız durumlarına göre ve dağılımın bağımsız veya bağımlı durumla başlamasına göre "Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı/bağımsız-bağımlı/bağımlı-bir bağımsız/bağımlı-bağımsız/bağımsız-bağımsız durumlu/bağımsız/bağımlı" kelimeleri getirilerek, simetrinin bağımlı durumlarının bulunabileceği olaylara göre bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz adları verilecektir. Simetriden seçilen durumların bulunabileceği olaylara göre simetrik, düzgün simetrik veya düzgün olmayan simetrik olasılık için birden fazla eşitlik kullanılması durumunda gerekmedikçe yeni tanımlama yapılmayacaktır.

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

Bu bölümde bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu olan dağılımın başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımın aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılığın eşitlikleri verilmektedir.

GÜLDÜNYA

SİMETRİDEN SEÇİLEN DÖRT DURUMA GÖRE TEK KALAN DÜZGÜN OLMAYAN SİMETRİK OLASILIK

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik} - n_{s} \quad \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)\,(n_{ik} + j \quad - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$
\frac{(n_{ik} - n_{s} - \mathbb{k}_2 - 1)!}{a - j_{ik} \quad 1)! \cdot (n_{ik} \quad j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

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

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

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

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

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j}$$

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

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

$$(\quad j_s+1)$$

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

$$)$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$
\frac{ - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

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

$$\frac{(\boldsymbol{l}_{\boldsymbol{s}}-1)!}{(\boldsymbol{l}_{\boldsymbol{s}}-j_i-\boldsymbol{l}+1)!\cdot(j_i-2)!}\cdot$$

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

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

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

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

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

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

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

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

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

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

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

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

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

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

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

$$\sum_{(\quad-j_s+1)}^{n}\ \sum_{(\quad)}^{(\quad)}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$fzS_{j_s,j_{ik}} \sum_{k=} \sum^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} {}_{D-j_{sa}+1)}$$

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

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

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

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

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(\quad ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

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

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

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

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

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

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

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

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

$$\frac{(n_s - j)!}{(n_s - i_i - \boldsymbol{n} - j^{sa})!}\cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

GUDUNYA

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GÜLDÜNYA

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

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

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$_{\epsilon z}S_{j_{sa},j_i}=\sum_{k=\boldsymbol{l}}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}$$

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

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

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

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

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$\mathbb{k}_z: z$

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

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

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

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

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

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$\boldsymbol{n} \geq \boldsymbol{n} - 1 \wedge I = \mathbb{k} > 0 \wedge$

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

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

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

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

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

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

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

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

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

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

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

$$
\frac{{}_{ik}-n \quad -\mathbb{k}_2-1)!}{(j^{sa}- \quad -1)!\ (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$\mathbb{k}_2 \wedge \boldsymbol{s}=\boldsymbol{s}+\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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

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

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

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

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

$$\frac{(n_{ik}-n_{sa}-j^{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

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

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

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

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

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

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

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

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

$$\sum_{}^{\boldsymbol{n}-j_i+1}$$

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

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$s > 4 \wedge z = s + \mathbb{k} \wedge$

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

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

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

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

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

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

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

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

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

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

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

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

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

GÜLDÜNYA

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

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

GÜLDÜNYA

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

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

GÜLDÜNYA

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

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

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

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

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

GÜLDÜNYA

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

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

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

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

$$\frac{(n_s-j_s)!}{(n_s-\boldsymbol{n}-j^{sa})!}\cdot$$

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

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

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

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

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

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

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

$j_{sa}^{i} \leq j_{sa}^{ik}-1 \wedge j_{sa}^{ik} < j_{sa}^{s}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}-\mathbb{k}_1, j_{sa}^{ik}, \cdots, j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}: s+\mathbb{k} \wedge$

$z \cdot z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

GÜDÜMYA

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{ik}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{s}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_s, j_{ik}, \ldots, j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{\boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - s - 1}^{\boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - s - 1} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}^{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l} - s + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\boldsymbol{l}+1)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}\cdot$$

$$\frac{(D+\boldsymbol{l_i})!}{(D+j_i+\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{j_{ik}=\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}+j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_i}+j_{sa}-j_{sa}^{ik}-s+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(\ )} \sum_{\quad}^{\quad} \frac{}{j^{sa}+j_{sa}-j_{ik}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=}^{} \frac{}{j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=}^{(\ )} \frac{}{j_{ik}-j^{sa}-} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + \quad - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \quad D - \boldsymbol{n} \quad \wedge$

$2 \leq j \quad j_{ik} - j_{sa}^{ik} + \quad j_s + j_{sa}^{} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad \leq j^{sa} \leq \quad + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \quad + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \quad \boldsymbol{l} = \mathbb{k} > 0 \wedge$

$\quad 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} -j_{ik}+1
$$

$$
(n_{ik}+j_{ik}-) \; n_{sa}^{sa}-j_i
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}}^{} \sum_{a}+1) \quad n_s=\boldsymbol{n}-j_i
$$

$$
\frac{(n_{\cdot}-n_{is}-1)!}{(j_s-2)!\cdot(n_i \quad j_s+1)!}\cdot
$$

$$
\frac{(n_{is} \quad _{ik}-1)!}{(j_{ik}-j_s \quad 1)!\cdot(n_{is} \quad j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{s} \quad -\mathbb{k}_2-1)!}{ \quad -j_{ik} \quad 1)!\cdot(n_{ik} \quad j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{ \quad -j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(\boldsymbol{n} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\quad+j_{sa}^{ik}-\quad-j_{sa})!}\cdot$$

$$\frac{(\quad-\boldsymbol{l_i})!}{-\boldsymbol{n}-\quad\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\quad}^{(\quad+2)}\ \sum_{j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_i}+\quad-\boldsymbol{l}-s+1)}\ \sum_{=j_s+j_{sa}\quad-j_{ik}+j_{sa}-j_{sa}^{ik})\ j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{(l_{ik}-j_{sa}^{ik}+2)}\ \sum_{j_{sa}=j_{ik}+j_{sa}-j_s}^{(j_s=l_i+n-s+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{(}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(}\ \sum_{n_s=\boldsymbol{n}+\mathbb{k}-j_s}^{}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{}$$

$$\sum_{n_{sa}=n_{ik}}^{(}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}^{}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < \quad \wedge \boldsymbol{l_s} > D - \quad + 1 \wedge$

$2 \leq j_{\quad} \leq j_{ik} - \quad + \quad \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} j_{ik}+1
$$

$$
(n_{ik}+ \quad -j^{sa}-\mathbb{k}_2)\ n_{sa}+ \quad -j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{{}_{is} - n_{ik} \quad 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{{}_{ik} - n \quad - \mathbb{k}_2 - 1)!}{(j^{sa} \quad - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{{}_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}
$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}}{(j_{ik}-j_s}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)}{(j^{sa}-j_{ik}-1)}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{ik}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!} \frac{(D-\boldsymbol{l}_{\boldsymbol{i}})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} +$ $- s = \boldsymbol{l}$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik}$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots$ $a\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=\boldsymbol{n}-j_i+1} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_i-\boldsymbol{l}+1)!\cdot(\boldsymbol{l}-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}^{ik})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_s-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l}_k+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot\ -j_i)!}$$

$$\sum_{=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}}$$

$$\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+1$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-}\ \sum_{(j^{sa}=j_i+\ -s)\ j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}$$

$$-j_s+1)$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\ j_s+1)\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$)$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\ \boldsymbol{l}\ n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \le j_s \le j\ -j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \le j_{ik} \le j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}\ -j_{sa}-j_{sa}^{ik} \le j^{sa} \le j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \ge \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{+\boldsymbol{n}+s\ -j_{sa}}^{\boldsymbol{l_s}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{j_s+1)}^{(n_i-j_s} \sum_{+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \quad)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\quad_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}-} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_{\cdot}-n_{is}-1)!}{(j_s-2)!\cdot(n_{\cdot}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j^{sa}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-j}{(\boldsymbol{l_s}-j_s\ \ 1)!\cdot\ \ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\ \ -\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\ \ j_{ik}\leq j^{sa}\ \ _{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j\ \ +s-j_{sa}\leq j\ \ <\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\ \ +j_{sa}-s=\ \ \wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\ \ j_{sa}^{s}=j_{sa}^{ik}-1$

$\boldsymbol{s}\colon\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots\ \ ,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=\ \ +\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\ \ +\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!} \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!} \frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!} \frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad\boldsymbol{l}-1)}{(\boldsymbol{l_s}-\quad-\boldsymbol{l}+1)\quad-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\quad)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}\quad(j^{sa}+j_s\quad-j_{ik}-j_{sa})!}$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j_i\quad\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{}$$

$$\sum_{j_{ik}=j\quad j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

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$2 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{(\quad)} = \sum^{(\quad)} \sum_{-j_{sa}^{ik}+1)}$$

$$\sum_{j^{sa}+j_{sa}^{ik}} \sum_{(\boldsymbol{l_{sa}}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1} \sum_{=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1} \sum_{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1} \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_{sa}=\boldsymbol{l_{sa}}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}_2-1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_i+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-1)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_i} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}+0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_1, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s)!\,(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\,(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l_{sa}} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{j_s,j_{ik},\ldots,j_i}=\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-_{k}-j_{sa}\right)!}$$

$$\frac{(\quad)!}{(D+j_{\quad}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\quad j_i)!}+$$

$$\sum^{(\quad)}\sum_{\quad j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{j_{sa}^{ik}-D-j_{sa}}^{(\boldsymbol{l_{sa}}\quad 1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{(j^{sa}\quad k+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_{\quad s}+1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{sa}+j_{sa}-j_{sa}^{ik}}^{(\ )}\ \sum_{}^{}\ -j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_i}^{(n_i-j_s+1)}\ \sum_{n_i=n}\ -j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=n}^{(\ }\ \sum_{j_{ik}-j^{sa}-}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+\ -\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\ D-\boldsymbol{n}+\ \wedge$

$2\leq j_s<j_{ik}-j_{sa}^{ik}+1\ j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-\ \leq j^{sa}\leq\ +j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}\ +1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\ I=\mathbb{k}>0\wedge$

$j_s\ -1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+s-j
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2-j_{ik}+1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} \quad n_{ik} - 1)!}{(j_{ik} - j_s \quad 1)! \cdot (n_{is} \quad j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{s} - \mathbb{k}_2 - 1)!}{a - j_{ik} \quad 1)! \cdot (n_{ik} \quad j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{ - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\ } \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} \quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = \quad ^{ik}_{sa} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-$$

$$\frac{(\boldsymbol{D}-\boldsymbol{l_i})!}{(\boldsymbol{n}-\boldsymbol{l}$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{}^{(\boldsymbol{n}-\boldsymbol{l}+1)} \sum_{(j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-}^{} \sum_{j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-} \sum_{(j_{sa}=j_{ik}+j_{sa}-} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(=\boldsymbol{n}+\mathbb{k}-j_s} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+} \sum_{-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n}$ $\wedge \boldsymbol{l_s} > D -$ $+ 1 \wedge$

$D + \boldsymbol{l_s} + s -$ $\boldsymbol{l_i} \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

2 $j_s \leq$ $- j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} -$ $_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \ (j^{sa}=j_i+j_{sa}-s)^{(\ )} \sum_{=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \ (n_{is}=\boldsymbol{n}+\mathbb{k}-1)^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_s+1}^{n_{is}+j_s-\mathbb{k}_1}
$$

$$
(n_{ik}+j_{ik}-j \quad \mathbb{k}_2)^{\ n_{sa}+j^{sa}-j_i} \sum_{=\boldsymbol{n}-j^{sa}+1}^{-j_i+1}
$$

$$
\frac{(n \quad - n_{is}-1)!}{(j_s \quad 2)! \cdot (n_i \quad - n_{is}-j_s+1)!} \cdot
$$

$$
\frac{(n \quad - n_{ik}-1)!}{(j_{ik} \quad j_s-1 \quad (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i \quad -1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)! \cdot (j_s-2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})! \cdot \left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!} \cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{n})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{sa}-j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}+\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge j_i+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{n}=\mathbb{k}>0$

$j_{sa} \leq j_{sa}^i-1 \wedge j_{sa}^{ik}-j_{sa}-1 \leq j_{sa}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}:\{j_{sa}^s,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa}^i,\cdots,j_{sa}^i\} \wedge$

$s>4 \wedge \boldsymbol{s}=s-\mathbb{k} \wedge$

$\mathbb{k}_2-2=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j^{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-j^{sa}-1)!}{(j^{sa}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\quad+j_{sa}^{ik}-\quad-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(\boldsymbol{n}-\boldsymbol{l}_{\quad})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{n}+j_{sa}^{ik}-\quad}^{\boldsymbol{l}+1}\ \sum_{(\quad-j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D} \sum_{= \boldsymbol{l_i} + \boldsymbol{n} + (-D - s)\ j_i = j^{sa} + s - j_{sa}} \sum$$

$$\sum_{+1)} \sum_{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{\boldsymbol{n} + \mathbb{k}\ (n_{is} = \mathbb{k} - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}$$

$$\sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_{sa} + j^{sa} - j_i}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)} \sum_{n_s = \boldsymbol{n} - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(\ )}\ \sum_{}^{}\ -j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{}^{(n_i-j_s+1)}\ \sum_{n_{ik}=}\ -j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=}^{(\ )}\ \sum_{j_{ik}-j^{sa}-}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+\ -\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\ D-\boldsymbol{n}+\ \wedge$

$D+\ +s-\boldsymbol{n}-\boldsymbol{l_i}+\ \leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\ s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+\ -j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\ =\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$\ t\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{\ldots+\mathbb{k}_2\ldots j_{ik}+1}^{n_{is}+\ldots-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{\ldots-j^{sa}+\ldots}^{(n_{ik}+j\ldots j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j\ldots j_i}
$$

$$
\frac{(n_i - n_{is} \ldots}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{\ldots - n_{ik} \ldots 1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{\ldots - \mathbb{k}_2 - 1)!}{(j^{sa} - \ldots - 1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(\ldots_i - j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s}{(n_s+j_i}$$

$$\frac{(\boldsymbol{l_s}}{}$$

$$\frac{(D}{(D+j_s}$$

$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$$

$$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq$$

$$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}$$

$$\boldsymbol{l_{ik}}-$$

$$D$$

$$j_{sa}$$

$$s$$

$$s > 4 \wedge \boldsymbol{s} =$$

$$\mathbb{k}_2$$

$$fzS_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j_{ik}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_{sa}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_{ik}}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\ } \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{\boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{} \sum_{(j_s = \boldsymbol{l_i} + \boldsymbol{n} - D - s + 1)}$$

$$\sum_{} \sum_{} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{\boldsymbol{n}+\mathbb{k}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D - j_{sa}}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j_{sa} = j_i + j_{sa} - s)} \sum_{j_i = \boldsymbol{l_{sa}} + \boldsymbol{n} + s - D - j_{sa}}^{\boldsymbol{l_{sa}} + s - j_{sa} + 1} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{n} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{(n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot $$

$$ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot $$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1}$$

$$\boldsymbol{l_{ik}} + s - j_{sa}^{ik} + 1$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum^{(\ )} \sum_{(j^{sa} = j_i + j_{sa} - s)\ j_i = \boldsymbol{l_{sa}}} \sum_{s} - j_{sa}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum^{(n_i - j_s + 1)} \sum_{n_i} - j_{ik} - \mathbb{k}_1$$

$$\sum^{(\ )} \sum_{(n_{sa} = n} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s}$ $D - \boldsymbol{n} +$ $\wedge$

$D +$ $s - \boldsymbol{n} - \boldsymbol{l_i} +$ $\leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1$ $j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

j_{ik} j_s $- j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} +$ $= \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$t \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{+\mathbb{k}_2}^{n_{is}+\ -j_{ik}-\mathbb{k}_1} \sum_{j_{ik}+1}
$$

$$
\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{} \sum_{n_{sa}+j_i}
$$

$$
\sum_{-j^{sa}+1}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is}}{j_s - 2)!\cdot(n_i - n_{is} - j_s + 1)!}\cdot
$$

$$
\frac{-n_{ik}-1)!}{j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{-\mathbb{k}_2-1)!}{(j^{sa}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{n})!}{(D+j_s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{sa}-j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}+\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}-\boldsymbol{l_{ik}} \wedge j_{ik}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D > \boldsymbol{n} < n \wedge \boldsymbol{n}=\mathbb{k} > 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}^{s}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s}=\mathbb{k}_1+\mathbb{k}_2 \wedge$

$\mathbb{k}_2 \geq 1 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j^{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa}^{ik} - D - 1}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad \boldsymbol{l}-1)}{(\boldsymbol{l_s}-\quad -\boldsymbol{l}+1)\quad -2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\quad)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}\quad\quad (j^{sa}+j_{s}\quad -j_{ik}-j_{sa})!}$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j_i\quad \boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}}\sum_{j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

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$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\sum_{j_{ik}, j^{sa}, j_i}} \sum_{\boldsymbol{l_{ik}}}^{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 2)} \sum_{(j_s = \boldsymbol{l_{ik}} + \boldsymbol{n} - D - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1} \sum_{(j_{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+2)}\sum_{\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\sum_{j_{sa}=j_{ik}+j_{sa}-j_s}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(\boldsymbol{n}+j_s+1)}\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_{sa}} \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=\boldsymbol{}^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-\mathbb{k}_1}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+}^{(n_{ik}+j_{ik}-j} \sum_{-j_i+1}^{\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_{is}-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}
$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s+j_i-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{n})!}{(D+j_s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j_{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_{ik}+j_{sa}-s \wedge j^{sa}+s-j_{sa}-1 \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_{ik}}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \boldsymbol{n} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_1, j_{sa}, \cdots, j_{sa}\}$

$s > 4 \wedge \boldsymbol{n} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s - \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} -$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{\quad - 1)!}{(n_s + \quad - \boldsymbol{n} - 1)$$

$$\frac{(\quad - \boldsymbol{l} - 1)!}{\quad - j_s - \boldsymbol{l}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(D$$

$$\frac{(D + \quad - \boldsymbol{n} - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\quad)} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j_{sa}^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{=j^{sa}+j_{sa}}^{j_{sa}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s+\boldsymbol{n}-D)}^{}$$

$$(\boldsymbol{l_i}+j_{\cdot}-\boldsymbol{l}-s+1)$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{\cdot}}^{}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\cdot)}^{}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$n \qquad\qquad n_{is}-j_{ik}-\mathbb{k}_1$$

$$\sum_{n_i=\boldsymbol{n}+\cdot}^{}\ \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}\cdot+1)}^{}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{}$$

$$\cdot+j_{ik}-j_{\cdot}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i$$

$$\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-j_i-\boldsymbol{n}-j_s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_1, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)\,(n_i - n_{is}}$$

$$\frac{(n_{is} - n_{ik}}{(j_{ik} - j_s}$$

$$\frac{n_{ik} - n_{sa}}{(j^{sa} - j_{ik} - 1)\,(n_{ik} + j_{sa}}$$

$$\frac{a} - n_s}{j_i - j^{sa} - 1)\,(n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!}$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!} \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!} \frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot \frac{(\boldsymbol{l_{ik}}-\quad-j_{sa}^{ik}+1)!}{(j_s+\quad-j_{ik}-\boldsymbol{l}\quad)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$\ldots_{\epsilon z} S_{j_{sa}, j_{sa}^{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}$$

$$\sum_{\ldots\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_i}+j_{sa}^{ik}\ldots-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-[illegible]}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{(D-\boldsymbol{l}_i)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot([illegible]-j_i)!}+$$

$$\sum_{k=[illegible]}^{[illegible]}\sum_{[illegible]}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{[illegible]=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-[illegible]}\sum_{(j^{sa}[illegible]k+j_{sa}-j_{sa}^{ik})}^{[illegible]}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n[illegible]s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{\left(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}\right)!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}}\sum_{}^{j^{sa}}-j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_i-j_s+1)}\sum_{n_{ik}=}\sum_{}^{}j_s-j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=}\sum_{}^{}j_{ik}-j^{sa}\sum_{}^{})\,n_s=n_{sa}+j^{sa}-j_i$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}$ $D-\boldsymbol{n}$ $1\wedge$

$2\leq$ $\leq j_{ik}-j_{sa}^{ik}+$ $j_s+j_{sa}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-$ $^{ik}\leq j^{sa}\leq$ $+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-$ $^{ik}+1>\boldsymbol{l_s}-\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\mathbb{k}>0\wedge$

$<j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_2+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{ik}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_{sa}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = {}^{ik}_{sa} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}-1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{sa}=j^{sa}+j_{sa}}\sum_{(j_{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(j_{sa}-\boldsymbol{l}+1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - j_{sa})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{\ldots+\mathbb{k}_2-j_{ik}+1}^{n_{is}+\ldots-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{\ldots-j^{sa}+\ldots}^{(n_{ik}+j_{\ldots}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j\ldots-j_i}
$$

$$
\frac{(n_i - n_{is} \ldots}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{\ldots - n_{ik} \ldots 1)!}{(j_{ik}-j_s-1)\ldots(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{\ldots - \mathbb{k}_2 - 1)!}{(j^{sa}-\ldots-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(\ldots j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_i=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - \quad - 1)}{(j_s - 2)\,(n_i - n_{is} \quad + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} \quad 1)!}{(j_{ik} - j_s \quad 1)\,(n_{is} + j_s \quad n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} \quad - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)\,(n_{ik} + j \quad - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{a - n_s \quad 1)!}{j_i - j^{sa} - 1)\,(n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!} \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+$ $-s=$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots$ $a\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k} =$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l}_s-\boldsymbol{l}-1)!}{(\boldsymbol{l}_s-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l}_{ik}-\boldsymbol{l}_s-j_{sa}+1)!}{(j_s+\boldsymbol{l}_{ik}-j_{ik}-1)!\cdot(j_{ik}-j_{sa}-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l}_i-1)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l}_i)!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l}_s-\boldsymbol{l}-1)}\sum_{(j_s=\boldsymbol{l}_{sa}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\boldsymbol{l}_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1$$

$$\sum_{j_{ik}=}^{j_{sa}^{ik}-1}\quad\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\quad-j_i)!}$$

$$\sum_{k=}^{(l_s-l-}\ \sum_{=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}}$$

$$\sum_{j_{ik}=j_s+}^{(\quad)}\ \sum_{-1\ (j^{sa}=}\ \sum_{+j_{sa}-j_{sa}^{ik})\ j_i=}$$

$$\sum_{-j_s+1)}^{n}\ \sum_{=\boldsymbol{n}+\mathbb{k}\ (n_{is}=\boldsymbol{n}+}\ \sum_{j_s+1)\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \quad n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_i \quad j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$\quad \leq j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-\boldsymbol{l}}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum^{(\ \ )} \qquad \sum_{\boldsymbol{l}_{s}+\boldsymbol{n}-j_{sa}^{ik}}^{\boldsymbol{l}_{s}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+} \sum_{+j_s+1)} \sum_{\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}}
$$

$$
\sum_{(n_{sa}=} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s -)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\quad - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=}^{(n_{ik}+j_{ik}} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{i}$$

$$\frac{(n_{is}$$

$$\frac{(n_{ik} - n_{s}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+s+\boldsymbol{n}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\,(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_{ik} + s - j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_{ik}} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = \quad + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \quad + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GULDUNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!} \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{+j_i-1)!\,(\boldsymbol{n}-j_i)!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot \frac{(\boldsymbol{l_{ik}}-\quad-j_{sa}^{ik}+1)!}{(j_s+\quad-j_{ik}-\boldsymbol{l}\quad)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l}-1)}{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}+1)!}{(j_s+\boldsymbol{l_{ik}}-}\cdot$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j_i-}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_s^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

GÜLDÜNYA

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{Z}[\ldots] = \sum_{\ldots} \sum_{\ldots}^{(j_{ik} - j_{sa}^{ik} + \ldots)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}} \sum_{(j^{sa}\ldots)}^{\ldots} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n\ldots+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}}^{(\ )} \sum_{j^{sa}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{=\boldsymbol{n}+1)}^{(n_i-j_s+} \sum_{n_{ik}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-+1)}^{(+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - \ )! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(\ ik - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j \ j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\ -j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{s}\ )}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s+\ -\boldsymbol{n}-\ )!\ -j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\ +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D\ j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}\ 1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}\ 1 \leq j_{ik} \leq\ ^{a}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+\ -j_{sa}^{ik} \leq j^{s}\ \leq j_i+j_{sa}-s \wedge\ ^{a}\ -j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 >\ \wedge \boldsymbol{l_{sa}}+\ ^{ik}-j_{sa}\ \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq\ < n \wedge I=\mathbb{k}\ 0 \wedge$

$j_{sa} \leq j_{sa}^{i}\ 1 \wedge j_{sa}^{ik} < j_{s}\ -1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_s^s\ \mathbb{k}_1, j_{sa}^{ik},\ \ ,\cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s}\ \ s+\mathbb{k} \wedge$

$\mathbb{k}_1 : z=2\ \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik})}$$

GÜLDÜNYA

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i \qquad -1)}{(j_s-2)!\,(n_i-n_{is} \qquad +1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s)!\,(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+j_{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(j^{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\,(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{\left(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1\right)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\quad-j_{sa}^{ik}+1)!}{(j_s+\quad-j_{ik}-\boldsymbol{l}\quad)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\quad)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ \ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\boldsymbol{l}+1)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_s}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-\boldsymbol{l_i}+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D>\boldsymbol{n}<\boldsymbol{l_s}\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 2 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\text{[illegible]}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\text{[illegible]}} \sum_{(\text{[illegible]}-\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D\text{[illegible]})}^{(\boldsymbol{l_i}+j_{sa}\text{[illegible]}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\text{[illegible]}}^{n} \sum_{n_{is}=\boldsymbol{n}+\Bbbk-\text{[illegible]}1)}^{\text{[illegible]}-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2-j_{ik}+1}^{n_{is}\text{[illegible]}-j_{ik}-\Bbbk_1}$$

$$\sum_{\text{[illegible]}_{sa}=\boldsymbol{n}-j^{sa}+1)}^{\text{[illegible]}_k+j_{ik}-j^{\text{[illegible]}}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-j_i-\boldsymbol{n}-j_s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq \boldsymbol{l_s}-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}+j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge j_{sa}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_i=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - \quad - 1)}{(j_s - 2)\,(n_i - n_{is} \quad + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} \quad 1)!}{(j_{ik} - j_s \quad 1)\,(n_{is} + j_s \quad n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} \quad \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)\,(n_{ik} + j \quad - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{a - n_s \quad 1)!}{j_i - j^{sa} - 1)\,(n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\ )!}$$

$$\frac{(D-\boldsymbol{l_i}\ )}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-\ = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^s = j_{sa}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\ \wedge$

$\mathbb{k}_z: z = 2 \wedge\ = \mathbb{k}_1+\ \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} -$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{\quad - 1)!}{(n_s + \quad - \boldsymbol{n} - 1)$$

$$\frac{(\quad - \boldsymbol{l} - 1)!}{\quad - j_s - \boldsymbol{l}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(D$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(\quad)} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{\boldsymbol{l_s} + s - \boldsymbol{l}} \sum_{j_i = \boldsymbol{l_{sa}} + \boldsymbol{n} + s - D - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{2}[\ldots, j_{ik}, j^{sa}, j_{sa}] = \sum_{\boldsymbol{l}=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l}+1)}$$

$$\sum_{j_i=j^{sa}+j_{sa}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{\boldsymbol{k}=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - j_{sa})}^{(\ j_{sa} - \boldsymbol{l})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s)}^{(\ j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_s} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\right\} \wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=}^{\ +s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-\mathbb{k}_1}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-n_{sa})\ n_{sa}+j^{sa}-j_i} \sum_{-j_i+1}^{}
$$

$$
\frac{(n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \left(\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(\ )}\right) \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \left(\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)}\right) \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\left(\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\right) \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s \quad)!}{(n_s+j_i \quad -j_{sa}^{s})!\cdot(\quad j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s} \quad \boldsymbol{l}-1)!}{ \quad \boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D \quad }{(D+j \quad \boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D \quad + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j \quad j_{sa}^{ik} - 1 \leq j_{ik} \quad j^{sa} + j_{sa} \quad j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} \quad s \wedge j^{sa} + s \quad j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \quad \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} \quad \boldsymbol{l_{ik}} \wedge \quad + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \quad \boldsymbol{n} < n \wedge \quad = \mathbb{k} > 0 \quad$

$j_{sa} \quad j_{sa}^{i} - 1 \wedge j_{sa}^{ik} \quad j_{sa} - 1 \quad \quad = j_{sa}^{ik} - 1 \wedge$

$\quad : \{j_{sa}^{s}, \mathbb{k} \quad j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa} \quad \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s \quad \mathbb{k} \wedge$

$\mathbb{k}_2 \quad = 2 \quad \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \left(\sum_{j^{sa}=j_i+j_{sa}-s}^{(\ )}\right) \sum_{j_i=\boldsymbol{l_{ik}}+\boldsymbol{n}+s-D-j_{sa}^{ik}}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

GULDUNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j^{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+s+\boldsymbol{n}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad\boldsymbol{l}-1)}{(\boldsymbol{l_s}-\quad\boldsymbol{l}+1)\quad-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}+1)!}{(j_s+\boldsymbol{l_{ik}}-\quad)!\cdot(j_{ik}-\quad-j_{sa}^{ik}+1)!}$$

$$\frac{(D-\boldsymbol{l_i}\quad}{(D+j_i\quad\boldsymbol{a}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{\quad=j^{sa}+j_s^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

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$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s,\ldots,j_{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}-\boldsymbol{l}+1}^{} \sum_{(j^{sa}=\ldots+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ldots-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\sum_{j_{ik}+j_{sa}-j_s}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+}^{(n_{is}+j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=n_{ik}}^{(\ )}\sum_{(j_{ik}-j^{sa}-\mathbb{k}_2)\ n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} - 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+\ldots-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{\boldsymbol{n}-j^{sa}+\ldots}^{(n_{ik}+\ldots-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+\ldots-j_i}
$$

$$
\frac{(n_i - n_{is} \ldots}{(j_s - 2) \ldots (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{\ldots_s - n_{ik} \ldots 1)!}{(j_{ik} - j_s - 1) \ldots (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{\ldots - n \ldots - \mathbb{k}_2 - 1)!}{(j^{sa} - \ldots - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{\ldots_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}+n-D}}^{\boldsymbol{l_{ik}-l+1}} \sum_{(j^{sa}=\boldsymbol{l_{sa}+n-D})}^{(\boldsymbol{l_{sa}-l+1})} \sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_i-l+1}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)!\,(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}}{(j_{ik}-j_s}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+j_{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{a}{(j_i-j^{sa}-1)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-1)!\cdot(\ \ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\ \ -\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\ \ )!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_{ik} + s - j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \ \ + j_{sa} - s > \ \ \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \ \ j_{sa}^{s} = j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \ \ , j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = \ \ + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \ \ + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GULDUNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{s}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(\boldsymbol{n} - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j_{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

GÜLDÜNYA

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j_{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}=j_{ik}-j_{sa}\ (l_{sa}+j_{sa}-D-s-1)}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{j_{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-D-s)}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik}+1)}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{\boldsymbol{k}=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_i}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{j_{sa}=\boldsymbol{l}-j_{sa}^{ik}}^{(\boldsymbol{l_{sa}}-1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{j_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_{is}+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{is}+\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{j_i=j^{sa}+j^{sa}-j_i}$$

$$\frac{(\boldsymbol{l_s}-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}+j_{sa}^{ik}+1 \wedge j_i+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j_{ik} \leq j_i+j_{sa}-1 \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{n}=\mathbb{k} > 1 \wedge$

$j_{sa}=j_{sa}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 1 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}}{(j_{ik}-j_s}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+j_{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{a}{(j_i-j^{sa}-1)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{ik}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j_{ik}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-j^{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{sa}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{\boldsymbol{k}=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{\boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s - 1} \sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{\boldsymbol{l_i} - \boldsymbol{l} + 1} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{n} \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{n_{sa} + j^{sa} - j_i} \sum_{n_s = \boldsymbol{n} - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\quad\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\quad+j_{sa}^{ik}-\quad-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-\quad)!\cdot(j_i+\quad-j^{sa}-s)!}$$

$$\frac{(D-\boldsymbol{l_i}-\quad)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}}^{-\boldsymbol{l}+1}\sum_{-j_{sa}^{ik}-D-s}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}^{(\ )}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-\boldsymbol{l}+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\ldots-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{s}\ldots+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}\ldots+1)} \sum_{j_i=\boldsymbol{l_i}+\ldots D}^{\ldots\boldsymbol{l}+1}
$$

$$
\sum_{n\ldots+\mathbb{k}}^{n} \sum_{(n_{is}=\ldots-j_s+1)}^{(\ldots-j_s+1)} \sum_{n_{ik}\ldots+j_{ik}+1}^{\ldots+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{\ldots=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j\ldots j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i}^{\boldsymbol{l_i}-\boldsymbol{l}+1}{}_{sa}+s-j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}{}_{+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{n_{is}+j_s}{}_{ik}-\mathbb{k}_1{}_{+1}$$

$$\sum_{}^{(n_{ik}+j_{ik}-}{}_{\mathbb{k}_2)}\ n_{sa}+j^{sa}-j$$

$$\sum_{sa=\boldsymbol{n}-j}\ \sum_{}{}_{\boldsymbol{n}-j_i+1}$$

$$\frac{(\ \ -n_{is}-1)!}{(\ \ -2)!\cdot(\ \ -n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{\ \ }-n_{ik}-1)!}{(\ \ -j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{\ \ }-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\ -j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}\ )}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s+\ -\boldsymbol{n}-\ )!\ -j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\ +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}-1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}-s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 = \ \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \ < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_s^s, \mathbb{k}_1, j_{sa}^{ik}, \ \ , j_{sa}^{i}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} \ \ s+\mathbb{k} \wedge$

$\mathbb{k}_1 : z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\boldsymbol{l_{ik}} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j_{ik}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_{sa}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!}.$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l}$$

$$(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} +$ $- s >$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik}$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots$ $a\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\quad)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\quad-\boldsymbol{l}+1)!\quad-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\quad)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\quad)!\quad(j^{sa}+j_{s}-j_{ik}-j_{sa})!}$$

$$\frac{(\boldsymbol{l_i}+\quad-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-\quad-\boldsymbol{l_{sa}})!\quad(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\quad\boldsymbol{l_i})!}{(D+\quad-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-_{k}-j_{sa}\right)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(}$$

$$\sum_{j_{ik}=j_s+j_{}}^{(}\sum_{(j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S_{j_s,\, j_{ik}, j^{sa}, j_i}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D} \sum_{(j_{sa}+\boldsymbol{n}-D)\ j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{(n_{is}=\mathbb{k}-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-\boldsymbol{l}}^{(\quad)} \sum_{j^{sa}=j_i+j_{sa}-\boldsymbol{l_{ik}}+1}^{(\quad)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{(\quad)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(\quad)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_s}^{(\quad)} \sum_{n_{is}=n_{ik}+j_s-j_{ik}-\mathbb{k}_1}^{(\quad)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\quad)}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l} + s - \boldsymbol{l_{ik}} \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{\boldsymbol{l_i}=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-n_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{\boldsymbol{n}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-j_i-\boldsymbol{n}-j_{sa})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq \boldsymbol{l_s}-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}+j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge j_{sa}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{i}}{(j_{ik}-j_{s}}$$

$$\frac{(n_{ik}-n_{s}-\mathbb{k}_2-1)}{(j^{sa}-j_{ik}-1)}$$

$$\frac{a}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\,(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$ + $j_{sa} - s >$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1$ $j_{sa}^{s} = j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots$ $, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} =$ $+ \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GULDUNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\quad-j_{sa}^{ik}+1)!}{(j_s+\quad-j_{ik}-\boldsymbol{l}\quad)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(\boldsymbol{n} - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j_{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

GÜLDÜNYA

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,\ldots,j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}\ldots^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l}\ldots+j_{sa}-D-s-1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{l}-j_i)!}+$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-j_{sa}}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{j^{sa}=\boldsymbol{l_{sa}}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-D)}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{ik}+j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l_{sa}})}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}_1}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}_1-j_s+1)}^{n_i-j_s+1}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

GÜLDÜNYA

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{j_i=\boldsymbol{n}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{n_i=n_{sa}+j^{sa}-j_i}$$

$$\frac{(\boldsymbol{n}-j_{sa}^{s})!}{(n_{sa}-j_i-\boldsymbol{n}+j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \leq j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge \mathbb{k} = \mathbb{k} > 0 \wedge$

$j_{sa} - j_{sa}^{s} = 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 0 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,\, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

GULDUNYA

$$\sum_{j_{ik}=\boldsymbol{l_{ik}+n}-D}^{\boldsymbol{l_i+n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=\boldsymbol{l_i+n}-D}^{\boldsymbol{l_i-l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)\,(n_i - n_{is}}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)\,(n_{is} + j_s - n_{ik} - j_{ik})!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)\,(n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}\cdot$$

$$\frac{a} - n_s - 1)!}{j_i - j^{sa} - 1)\,(n_{sa} + j^{sa} - n_s - j_i)!}\cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}\cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s - \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_s+j^{sa}-n_{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{\boldsymbol{k}=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

GÜLDÜNYA

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} \quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = \quad _{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\,(j_s-2)!}$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}-1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}-1)!\,(j_{ik}-j_s-\quad+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-\quad)!\cdot(j_i+\quad-j^{sa}-s)!}$$

$$\frac{(D-\boldsymbol{l_i}\quad)}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{}$$

$$\sum_{j_{ik}=\quad+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right.}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{}^{(D-s+1)}$$

$$\sum_{k=j_s+j_{sa}^{ik}-1}^{}\left(j^{s}\sum_{ik}^{}+j_{sa}-j_{sa}^{ik}\right)\sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-1)}\left(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1\right)\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}^{}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < \wedge\ \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\quad+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=j^{sa}+} \sum_{(j^{sa}=\boldsymbol{l_{sa}}\quad D)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-\quad 1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_i+j_{sa}-s}^{(\ )}\sum_{=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s}^{}\mathbb{k}_1$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}}^{(\ )}\sum_{=}^{}+j^{sa}-j_i$$

$$\frac{(\boldsymbol{l_s}-j_{sa}^{s})!}{(\boldsymbol{n}-j_i-\boldsymbol{n}+j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \leq j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \mathbb{k} > 0 \wedge$

$j_{sa} > j_{sa}^{s} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 0 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

GULDUNYA

$$\sum_{j_{ik}=\boldsymbol{l_{ik}+n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ \ )} \sum_{j_i=\boldsymbol{l_i+n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)!\,(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}}{(j_{ik}-j_{}!\,(n_{is}+j_{}-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{}-\mathbb{k}_2-1)}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+j_{}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{{}_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\,(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ \ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s - \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!} \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+$ $-s=$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots a\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k} =$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)} \sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\cdots)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\cdots-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\cdots-\boldsymbol{l}+1)!\cdot(\cdots-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}+1)!}{(j_s+\boldsymbol{l_{ik}}-\cdots)!\cdot(j_{ik}-\cdots-j_{sa}^{ik}+1)!}$$

$$\frac{(\cdots+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\cdots+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\cdots-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\cdots_{ik}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{}\sum_{}^{}$$

$$\sum_{j_{ik}=}^{(\boldsymbol{l_s}-\boldsymbol{l})}\sum_{+j_{sa}^{ik}-j_{sa}}^{}\sum_{(+\boldsymbol{n}+j_{sa}-D-s)}^{}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{}^{m}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j_{sa}^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}-\boldsymbol{l}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{\boldsymbol{l_i}+\boldsymbol{n}+s-j_{sa}}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{(j_{sa}=\boldsymbol{l_s}+\boldsymbol{n}-D}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)}\ \sum_{}^{}\ -j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{}^{(n_i-j_s+1}\ \sum_{}^{n_{is}+j_s-j_{ik}-}\ \sum_{}^{\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{}^{(n_{}-j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{}^{j^{sa}-j_i}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_{}+1)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{}_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{\left(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}\right)!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

GÜLDÜNYA

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)}\ \sum_{j_{sa}}^{j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+}^{(n_{ik}+j_{ik}-}\ \sum_{\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{-n_{is}-1)!}{(-2)!\cdot(-n_{is}-j_s+1)!}\cdot$$

$$\frac{(-n_{ik}-1)!}{(-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{sa}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\ -j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{s}\ )}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s+\ -\boldsymbol{n}-\ )!\ (\ -j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\ +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D\ j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}\ 1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}\ 1 \leq j_{ik} \leq\ ^{a}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+\ -j_{sa}^{ik} \leq j^{s}\ \leq j_i+j_{sa}-s \wedge\ ^{a}\ -j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 >\ \wedge \boldsymbol{l_{sa}}+\ ^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq\ < n \wedge I=\mathbb{k}\ 0 \wedge$

$j_{sa} \leq j_{sa}^{i}\ 1 \wedge j_{sa}^{ik} < j_{s}\ -1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_s^s\ \mathbb{k}_1, j_{sa}^{ik},\ \ ^{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s}\ s+\mathbb{k} \wedge$

$\mathbb{k}_1 : z=2\ \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i - 1)}{(j_s - 2) \cdot (n_i - n_{is}}$$

$$\frac{(n_{is} - n_{i}}{(j_{ik} - j_{}}$$

$$\frac{(n_{ik} - n_{} - \mathbb{k}_2 -}{(j^{sa} - j_{ik} - 1}$$

$$\frac{n_{sa} - n_s}{(j_i - j^{sa} - 1}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!}$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j_{ik}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_{sa}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l}$$

$$(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} +$ $- s =$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} -$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots$ $a\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad \boldsymbol{l}-1)}{(\boldsymbol{l_s}-\quad -\boldsymbol{l}+1)\quad -2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}+1)!}{(j_s+\boldsymbol{l_{ik}}-\quad)!\cdot(j_{ik}-\quad -j_{sa}^{ik}+1)!}$$

$$\frac{+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\quad +j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad -\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)}\sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

GÜLDÜNYA

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j_{sa}^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}+j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{(\boldsymbol{l_s}+j_{sa}-j_{sa})} \sum_{j_{sa}=s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \quad \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \quad \sum_{} \quad -j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \quad \sum_{(n_i-j_s}^{} \quad \sum_{n_{is}+j_s-j_{ik}}^{} \quad \sum_{+\mathbb{k}_2-j_{ik}+1}^{}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{} \quad -j_i$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s -)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-j_i-\boldsymbol{n}-j_s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}+0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_1, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{i}}{(j_{ik}-j_{}}$$

$$\frac{(n_{ik}-n_{s}-\mathbb{k}_2-1)}{(j^{sa}-j_{ik}-1)}$$

$$\frac{}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j_{ik}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_{sa}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_{ik}}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = {}^{ik}_{sa} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-\quad+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\quad)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\quad)!\cdot(j^{sa}+j_{sa}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}\ \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right)}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\right.-j_{sa})!}$$

$$\frac{(D}{(D+j_i\ \boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}\ )!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}\sum_{(j_s}\ \sum_{j_{sa}+1)}$$

$$\sum_{=j_s+j_{sa}^{ik}-1}^{(}\ \sum_{(j^{sa}\ _k+j_{sa}-j_{sa}^{ik})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-\ 1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$>\boldsymbol{n}\ldots\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$$

$$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}-D)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}-s)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n_i} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )}\sum_{(j^{sa}=j_i+j_{sa}}\sum_{\boldsymbol{n}-D}^{\boldsymbol{s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_i-j_s+1)}^{(\ )}\sum_{n_{ik}=}\sum_{j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=}^{(\ )}\sum_{j_{ik}-j^{sa}}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+\quad-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\quad D-\boldsymbol{n}\quad\wedge$

$D+\quad+s-\boldsymbol{n}-\boldsymbol{l_i}\quad\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\quad j_{ik}+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+\quad-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\quad>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$\quad\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} j_{ik}+1
$$

$$
(n_{ik} - j^{sa}-\mathbb{k}_2)\ n_{sa} - j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - }{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{n_{is} - n_{ik}}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s+j_i-j^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{n})!}{(D+j_s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{sa}-j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s}+\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \leq \boldsymbol{l_{ik}} \wedge j_{ik}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{n}=\mathbb{k} > 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}^{s}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s}=\mathbb{k}_1+\mathbb{k}_2 \wedge$

$\mathbb{k}_2 \geq 1 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j_{ik}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-j^{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}$$

$$\frac{(D-\boldsymbol{l}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{} \leq j^{sa}+j_{sa}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \leq j^{sa}+s-j_{} \leq j_i \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l} \wedge \boldsymbol{l_i}+j_{sa}-\boldsymbol{l} \geq \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+ \wedge$

$\mathbb{k}_z: z = 2 \wedge = \mathbb{k}_1 + \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} -$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{\quad - 1)!}{(n_s + \quad - \boldsymbol{n} - 1)$$

$$\frac{(\quad - \boldsymbol{l} - 1)!}{\quad - j_s - \boldsymbol{l}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(\boldsymbol{l_{sa}} + j_s$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ \ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ \ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s \cdots j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{a+j_{sa}^{ik}-j} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right.}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\right.-j_{sa})!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j_s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{\boldsymbol{l_{ik}}=\boldsymbol{l}}^{(\boldsymbol{l_s}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{}$$

$$\sum_{j_{ik}=}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{\infty}\sum_{(j_{sa}=j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\boldsymbol{l_s}>\boldsymbol{n}+1\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$2\le j_s\le j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\le j_i\le\boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{\boldsymbol{k}=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l}_{\boldsymbol{i}}+\boldsymbol{n}-D)}^{(\boldsymbol{l}_{\boldsymbol{i}}+\boldsymbol{n}-D-s-1)} \sum_{j_{ik}=\boldsymbol{l}_{\boldsymbol{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l}_{\boldsymbol{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l}_{\boldsymbol{i}}+\boldsymbol{n}-D-s-1)} \sum_{j_i=\boldsymbol{l}_{\boldsymbol{i}}+\boldsymbol{n}-D}^{j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}_1}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{j_{ik}-j_{sa}^{ik}+1}\sum_{(j_s=}^{}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\quad\sum_{}^{(\boldsymbol{l_s}+}\quad\sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\quad\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-}^{}\quad\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{}$$

$$\sum_{}^{}\quad\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{}\quad\sum_{n_s=\boldsymbol{n}-j_i+1}^{}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \quad \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-}^{(\boldsymbol{l}-\boldsymbol{l}+1)} \quad \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}}^{n} \quad \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{n_i-j_s} \quad \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{n_{ik}+j_{ik}-} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{(n_{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D}\sum_{-j^{sa}}-j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(}^{(n_i-j_s+1)}\sum_{n_{ik}=}+j_s-j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=}\sum_{+j_{ik}-j^{sa}}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^s)!}{(n_s+\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}$ $D-\boldsymbol{n}$ $1\wedge$

$2\leq$ $\leq j_{ik}-j_{sa}^{ik}+$ $\wedge j_s+j_{sa}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}$ $^{ik}\leq j^{sa}\leq$ $+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-$ $^{ik}+1>$ $\boldsymbol{sa}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<$ $J=\mathbb{k}>0\wedge$

$<j^i$ $1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^s=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^s,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^i\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}-j_{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{-j_{ik}+1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}-j} \sum_{a}^{n_{sa}-j_i} \sum_{+1)}$$

$$\sum_{n_s=\boldsymbol{n}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i \quad j_s + 1)!} \cdot$$

$$\frac{(n_{is} \quad _{ik} - 1)!}{(j_{ik} - j_s \quad 1)! \cdot (n_{is} \quad j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{s} - \mathbb{k}_2 - 1)!}{ - j_{ik} \quad 1)! \cdot (n_{ik} \quad j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{ - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+}^{} \sum_{-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{}_{})}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s}{(n_s-\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}$ $\wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{} \leq j_{ik} \leq$ $a+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+$ $-j_{sa}^{ik} \leq j^{} \leq j_i+j_{sa}-s \wedge$ $a-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 >$ $\wedge \boldsymbol{l_{sa}}+$ $ik-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq$ $< n \wedge I = \mathbb{k}$ $0 \wedge$

$j_{sa} \leq j_{sa}^{i}$ $1 \wedge j_{sa}^{ik} < j_s$ $-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_s$ $\mathbb{k}_1, j_{sa}^{ik},$ $_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s}$ $s+\mathbb{k} \wedge$

$\cdot z = 2$ $\mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}+n}-D}^{\boldsymbol{l_{ik}-l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}+n}-D)}^{(\boldsymbol{l_{sa}-l}+1)} \sum_{j_i=\boldsymbol{l_i+n}-D}^{\boldsymbol{l_i-l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - j_{ik})!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}-l+1}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}-l+1})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i-l+1}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}}{(j_{ik}-j_s}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)}{(j^{sa}-j_{ik}-1)}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s+j_i-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{n})!}{(D+j_s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{sa}-j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s}+\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \leq \boldsymbol{l_{ik}} \wedge j_{ik}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D > \boldsymbol{n} < n \wedge \boldsymbol{n} = \mathbb{k} > 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}^{s}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = \boldsymbol{s} + \mathbb{k} \wedge$

$\mathbb{k}_2 + \boldsymbol{n} = \boldsymbol{n} + \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j^{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\,(\boldsymbol{n}-j^{sa}}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1$ $j_{ik} \leq j^{sa}$ $_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge$ $+ s - j_{sa} \leq$ $\boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$ $+ j_{sa} - s >$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} -$ $_{sa}^{s} = j_{sa}^{ik} -$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots$ $, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} =$ $+ \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GULDUNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \quad)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} \quad n_s - j_i)!} \cdot$$

$$\frac{\quad - 1)!}{(n_s + \quad - \boldsymbol{n} - 1) \quad - j_i)!} \cdot$$

$$\frac{(\quad - \boldsymbol{l} - 1)!}{\quad - j_s - \boldsymbol{l} \quad)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + \quad - \boldsymbol{l_{sa}}}{(j^{sa} + \boldsymbol{l_i} \quad - \boldsymbol{l_{sa}}) \quad (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D \quad \boldsymbol{l_i})!}{(D + \quad - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{sa} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{j_i = \boldsymbol{l_{sa}} + s - \boldsymbol{l} - j_{sa} + 2}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{\boldsymbol{n}}\sum_{j_{sa}=j_i+j_{sa}-s}^{(\ )}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\boldsymbol{n}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s \ldots \boldsymbol{k}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa} \ldots j_{sa}^{ik})}^{(j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n} \ldots}^{\boldsymbol{l_{ik}}+s \ldots j_{sa}^{ik}+1}
$$

$$
\sum_{\ldots+\mathbb{k}}^{n} \sum_{(n_{is} \ldots \mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik} \ldots j_{ik}+1}^{\ldots+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{\ldots a=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+\ldots j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{-j_{ik}+1}$$

$$(n_{ik}+j_{ik}$$

$$\sum_{(n_{sa}=\boldsymbol{n}$$

$$\frac{(n_i - n_{is}$$

$$\frac{(n_{is}$$

$$\frac{(n_{ik} - n_{sa}$$

$$\frac{(n_{sa} - n_s - 1)!}{(n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\,(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} + j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_{sa}} + j_{sa} - s > 0 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = \ + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \ + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(j_i+j_{sa}-s)}\ \sum_{(j^{sa}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}-D-1)}^{\boldsymbol{l_s}+s-\boldsymbol{l}}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \quad)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} \quad n_s - j_i)!} \cdot$$

$$\frac{\quad - 1)!}{(n_s + \quad - \boldsymbol{n} - 1) \quad - j_i)!} \cdot$$

$$\frac{(\quad - \boldsymbol{l} - 1)!}{\quad - j_s - \boldsymbol{l} \quad)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + \quad - \boldsymbol{l_{sa}}}{(j^{sa} + \boldsymbol{l_i} \quad - \boldsymbol{l_{sa}}) \quad (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D \quad \boldsymbol{l_i})!}{(D + \quad - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} - j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa} - D - 1)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{j_i = \boldsymbol{l_s} + s - \boldsymbol{l} + 1}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{\boldsymbol{l}}^{(\ )}\sum_{(j_s=\ +\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-}^{(\ )}\sum_{(j^{sa}=j_i+\ -s)\ j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}\ (n_{is}-\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum^{(n_i-\ -1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<1\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s \quad +\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{} \sum_{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)}^{} \sum_{\quad -\boldsymbol{l}+1}^{}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{} \sum_{(j^{sa} \quad +\boldsymbol{n}-D)}^{} \sum_{j_i=\boldsymbol{l_i} \quad -D}^{}
$$

$$
\sum_{\quad}^{n} \sum_{(n_i-j_s+1)}^{} \sum_{n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{}
$$

$$
\sum_{\boldsymbol{n}+\mathbb{k}}^{} \sum_{(n_{is} \quad +\mathbb{k}-j_s+1)}^{} \sum_{\quad -j_{ik}+1}^{}
$$

$$
(n_{ik} \quad -j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is} - 1)!}{2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$(n_{ik}+j_{ik}$$

$$(n_{sa}=$$

$$\frac{(n_i - n$$

$$\frac{(n_{is}$$

$$\frac{(n_{ik} - n_s$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\,(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-1)!\cdot(\quad-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} + j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_{ik} + s - j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \quad + j_{sa} - s > \quad \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \quad j_{sa}^{s} = j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots \quad, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = \quad + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \quad + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!} \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!} \frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!} \frac{(\boldsymbol{l_i}+\quad-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})} \sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j_{sa}}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=\boldsymbol{n}-j_i+1} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\quad)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\quad j_s-\boldsymbol{l}+1)!\cdot(\quad-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_s}-s)!}{(j^{sa}+\boldsymbol{l_i}-\quad)!\cdot(j_i+\quad-j^{sa}-s)!}\cdot$$

$$\frac{(D-\quad)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\quad_k-\boldsymbol{l_{sa}}}^{(\quad_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S_{j_s\ ,j_{ik},j^{sa},j_i}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})} \sum_{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-D-1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}}}^{(\ \ )}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{j_{is} = j^{sa}}^{-\boldsymbol{l}+1} - j_{sa}$$

$$\sum_{n_i = \boldsymbol{n}+}^{n} \sum^{(n_i - j_s}$$

$$\sum^{n_{is} + j_s - j_{ik}}$$

$$\sum^{\boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}$$

$$\sum^{j^{sa} - j_i}$$

$$\sum_{(n_{sa} = \boldsymbol{n}}$$

$$\sum_{n_s = \boldsymbol{n} - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s -)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\quad k - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ \ )}$$

GÜLDÜNYA

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=\boldsymbol{n}+j^{sa}-j_i}$$

$$\frac{(n_s+j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j_{sa}^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_{ik}+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_s}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \boldsymbol{n} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}^{s}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, j_{sa}, \cdots, j_{sa}\}$

$s > 4 \wedge \boldsymbol{n} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}_z = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + \boldsymbol{l_{sa}} - \boldsymbol{l_{sa}} - 1)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l} - j_{sa} + 1} \sum_{(j^{sa} = j_{ik} + \boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

GÜLDÜNYA

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\mathbb{k}_z S_{j_s, j_{ik}, \ldots, j_i} = \sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_s})}$$

$$\sum_{j_{\ldots}}^{\boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - \ldots} \sum_{\boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{(\quad)} \sum_{(\ldots = j_{ik} + \boldsymbol{l_{sa}} - \boldsymbol{l_s})}^{\boldsymbol{l_i} - \boldsymbol{l} + 1} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}$$

$$\sum_{i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )}\sum_{(j_s=}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}}^{(\ \ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$\sum_{n_i=\boldsymbol{n}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{}$$

$$\sum_{(}\ \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-j_i-\boldsymbol{n}-j^{sa})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j_i \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \leq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{ik}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge s = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}}{(j_{ik}-j_s}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+j_{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{a}{(j_i-j^{sa}-1)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!} \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!} \frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!} \frac{(\boldsymbol{l_i}+\quad-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{\boldsymbol{k}=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\quad)} \sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-S}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\quad)} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz^{S}{}_{j_s \ldots j^{sa}\ldots} \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\boldsymbol{l}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(\boldsymbol{l_i}-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{\boldsymbol{n}}\sum_{(j_{is}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+[illegible]}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}[illegible]}^{(\ )}\ \sum_{[illegible]=j^{s}[illegible]-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{[illegible]+1)}^{(n_i-j_s+[illegible]}\ \sum_{n_{ik}[illegible]+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}[illegible]+j_{ik}-j[illegible]\mathbb{k}_2)}^{[illegible])}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j[illegible]-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\ [illegible]\ \boldsymbol{n} < n \wedge [illegible] > D - [illegible]\ 1 \wedge$

$2 \leq [illegible] \leq j_{ik} - j_{sa}^{ik} + [illegible] \wedge j_s + j[illegible]\ 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$[illegible] + j_{sa}\ [illegible]\ j_{sa}^{ik} \leq j^{sa} \leq [illegible] + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - [illegible] + 1 = [illegible] + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D\ [illegible]\ \boldsymbol{n} < [illegible] \wedge I = \mathbb{k} > 0 \wedge$

$[illegible] \leq j_{sa}^{i}\ [illegible] \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}\ \ 2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}
$$

$$
\sum_{(n_{sa}=\ \ {}^{sa}+1)}^{(n_{ik}+j_{ik}\ \ \mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j}^{n_{sa}\ \ {}^{sa}-j_i}
$$

$$
\frac{(n_i - n_{i} - 1)!}{(j_s - 2)! \cdot (\ \ n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{s} - \mathbb{k}_2 - 1)!}{({}^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(\ \ - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j^{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ \ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}_{\boldsymbol{s}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-\boldsymbol{l}_{\boldsymbol{s}}-s)!}\cdot$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{s}}-\boldsymbol{l_i})!}{j_i-\boldsymbol{n}-\boldsymbol{l}_{\boldsymbol{s}}+\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\quad+1)}$$

$$\sum_{j_{ik}=j_s}^{(\quad)}\sum_{j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+1}^{(D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\quad)} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-1}^{(\quad)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\quad)}$$

$$\sum_{n_i=\boldsymbol{n}+1}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(\quad)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\quad)}$$

$$\sum_{(n_{sa}=n_{ik}+}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\quad)}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \quad + 1 \wedge$

$D + \boldsymbol{l_s} + s \quad - \boldsymbol{l_i} + \quad \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \quad - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \quad + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{=\boldsymbol{l_i}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{+1)}^{n_{is}+j_s} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{k-\mathbb{k}_1} \sum_{-j_s+1}
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}}^{(n_{ik}+j_{ik}-j} \sum_{-j_i+1}^{k_2)\ n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_{is}-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=\boldsymbol{n}+j^{sa}-j_i}$$

$$\frac{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(j_i-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\boldsymbol{l_i}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{sa}-j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}+\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}-\boldsymbol{l_{ik}} \wedge D+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \mathbb{k} > 1 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}^{s}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = \boldsymbol{l}+\mathbb{k} \wedge$

$\mathbb{k}_1 = \boldsymbol{l} \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j^{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{(j^{sa} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa} - D - 1)}^{\boldsymbol{l_i} - \boldsymbol{l} + 1} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}_{\quad}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}}\quad)!\cdot(j_i+j_{sa}\quad-s)!}\cdot$$

$$\frac{(\boldsymbol{l}_{\quad}-\boldsymbol{l_i})!}{\quad-\boldsymbol{n}-\quad!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\quad=\boldsymbol{l}}^{\quad}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{\quad}$$

$$\sum_{j_{ik}\quad+\boldsymbol{l_{ik}}-\quad}\ \sum_{j^{sa}=j_i+j_{sa}-s)}^{(\quad)}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})} \sum_{j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D} \sum_{(n_{is} = \mathbb{k} - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)} \sum_{n_s = \boldsymbol{n} - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_i}}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1}\ \sum^{(\ )}\ \sum\ (j^{sa}=j_{ik}+\boldsymbol{l_{sa}}\ \ =j^{sa}\ \ -j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum^{(n_i-j_s+1)}\ \sum\ (\ \ +1)\ n_{ik}=\ \ +j_s-j_{ik}-\mathbb{k}_1$$

$$\sum^{(\ )}\ \sum\ (n_{sa}=\ \ +j_{ik}-j^{sa}\ \ )\ n_s=n_{sa}+j^{sa}-j_i$$

$$\frac{(n_s-j_{sa}^s)!}{(n_s+j\ \ -\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\ \ D-\boldsymbol{n}\ \ 1\wedge$

$D+\ \ +s-\boldsymbol{n}-\boldsymbol{l_i}\ \ 1\leq\boldsymbol{l}\leq\ \ -\boldsymbol{n}+1\wedge$

$\ \leq j_s\leq\ \ -j_{sa}^{ik}+1\wedge\ \ +j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+\ \ -j_{sa}^{ik}\ \ \leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\ \ =\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$\ >\boldsymbol{n}<\ \ \wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^i-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^s=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^s,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^i\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}{}_2-j_{ik}+1
$$

$$
(n_{ik}+j_{ik}{}_{sa}-\mathbb{k}_2)\ n_{sa}{}^{j^{sa}-j_i}
$$

$$
\sum_{(n_{sa}=}^{} \sum_{j^{sa}+1)}^{} \ n_s=\boldsymbol{n}-j
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{ik} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\,(\boldsymbol{n}-j^{sa}}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-$$

$$\frac{(\boldsymbol{l_s}-j_s$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-$$

$$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq D-$$

$$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_s\leq j_{sa}-1\wedge j_{sa}^{s}$$

$$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_s\cdots,\mathbb{k}_2,j_s\cdots,j_{sa}^{i}\}\wedge$$

$$s>4\wedge\boldsymbol{s}=s+$$

$$\mathbb{k}_z:z$$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}\ \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ \ )}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!} \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!} \frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!} \frac{(\boldsymbol{l_i}+\quad-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)} \sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}}$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ \ )}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\quad \boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot\quad j_i)!}-$$

$$\sum_{(\boldsymbol{l_s}-\boldsymbol{l}+1)}^{} \sum_{-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\quad)} \sum_{=j_{ik}+\boldsymbol{l_{sa}}-\quad)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{\quad i=\boldsymbol{n}+\mathbb{k}}^{n_{} \quad (n_i-\quad 1)} \sum_{(n_{is}-\boldsymbol{n}+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < \quad \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i
$$

$$
\sum_{n+\mathbb{k}}^{n} \sum_{(n_{is}
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1}^{(n_{ik}+1} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{ik - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2-j_{ik}+1}$$

$$(n_{ik}+j_{ik}$$

$$(n_{sa}=$$

$$\frac{(n_i-1)!}{(j_s-2)!\cdot(}\cdot$$

$$\frac{(n_{is}$$

$$\frac{(n_{ik}-n_s$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\,(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_{ik} + s - j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_{ik}} + j_{sa} - s = \boldsymbol{l} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = \quad + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \quad + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!} \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!} \frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!} \frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{(\quad)} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=\boldsymbol{n}-j_i+1} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\quad)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\quad(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\quad j_s-\boldsymbol{l}+1)!\quad(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\quad)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\quad)!\quad(j^{sa}+j_s-\quad-j_{ik}-j_{sa})!}$$

$$\frac{(D-\boldsymbol{l_i}\quad)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)}\sum_{(j^{sa}=j_i+\boldsymbol{l_i}-\boldsymbol{l_{sa}})}^{\boldsymbol{l_s}+s-\boldsymbol{l}}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

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$2 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\text{[illegible]}} = \sum_{\text{[illegible]}} \sum_{(j_s \text{[illegible]} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{\text{[illegible]} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{j^{sa} + j_{sa}^{ik} - j_{\text{[illegible]}}} \sum_{(j^{sa} = \text{[illegible]} + j_{sa} - D - s)}^{(\boldsymbol{l_{ik}} + j_{sa} \text{[illegible]} j_{sa}^{ik} + 1)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i \text{[illegible]} + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}}}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)}\ \sum_{j^{sa}}^{}\ -\boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{=\boldsymbol{n}}^{(n_i-j_s+1)}\ \sum_{n_{ik}}^{n_{is}+j_s-j_{ik}}\ \sum_{+\mathbb{k}_2-j_{ik}+1}^{}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-}^{(\ \ +1)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\ \ !\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(\ \ ik-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(\ \ j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_{}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n}$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}$

$j_{ik} +$ $- j_{sa}^{ik} \leq j$ $\leq j_i + j_{sa} - s \wedge$ $- j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1$ $\wedge \boldsymbol{l_{sa}}$ $- j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq$ $< n \wedge I = \mathbb{k}$ $0 \wedge$

$\leq j_{sa}^{i}$ $1 \wedge j_{sa}^{ik} < j_s$ $- 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_s^s, \mathbb{k}_1, j_{sa}^{ik},$ $, \cdots, j_{sa}^{i}\} \wedge$

$s >$ $4 \wedge \boldsymbol{s}$ $s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2$ $\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

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$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}}{(j_{ik}-j_s}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+j_s-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s}{(j_i-j^{sa}-1)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{ik}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l_{sa}} + \boldsymbol{l_{sa}} - j_{ik}^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ \ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_s \cdots j_{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_s})}$$

$$\sum^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-s-1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\boldsymbol{l}_s)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l}_i)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{j_{ik}=\boldsymbol{n}+\boldsymbol{l_{ik}}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j^{sa}=\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(\ )}\sum_{(j_{ik}=\boldsymbol{n}+\boldsymbol{l_s}-\boldsymbol{l_s})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}}}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}\right.}^{(\ )}\ \sum_{j^{sa}}\ -\boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_i-j_s+1)}\ \sum_{n_{ik}=}\ j_s-j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=}\ j_{ik}-j^{sa}\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+\ -\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\ D-\boldsymbol{n}\ 1\wedge$

$2\leq\ \leq j_{ik}-j_{sa}^{ik}+\ j_s+j_{sa}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-\ ^{ik}\leq j^{sa}\leq\ +j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-\ ^{k}+1=\boldsymbol{l_s}-\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge\ =\mathbb{k}>0\wedge$

$\ <j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

GÜLDÜNYA

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})} \sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l}}$$

$$ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot $$

$$ \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot $$

$$ \frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} + $$

$$ \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})} \sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}} $$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j^{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-j_i-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

GÜLDÜNYA

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - \quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = \quad - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\int (j_s, j_{ik}, j^{sa}, j_i) = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i} + \boldsymbol{n} - D - s)} \sum_{(j_s = \boldsymbol{l_{ik}} + \boldsymbol{n} - D - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_s + \boldsymbol{l_{ik}} - \boldsymbol{l_s}}^{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l} - s + 1)} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\quad(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\quad+j_{sa}^{ik}-\quad j_{sa})!}\cdot$$

$$\frac{(\quad-\boldsymbol{l_i})!}{-\boldsymbol{n}-\quad\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\quad}^{(\quad+2)}\quad\sum_{j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{}$$

$$\sum_{=j_s+\boldsymbol{l_{ik}}}^{(\boldsymbol{l_i}+\quad-\boldsymbol{l}-s+1)}\quad\sum_{-j_{ik}+j_{sa}-j_{sa}^{ik})}\quad\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\quad\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\quad\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\quad\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} =$$

$$\sum_{\boldsymbol{l_{ik}} \in \mathbb{I}} \sum_{(j_s = \boldsymbol{l_i} + \boldsymbol{n} - s + 1)}^{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 2)}$$

$$\sum_{j_{ik} = j_s + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{j_{sa} = j_{ik} + j_{sa} - j_s} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}} \sum_{(n_s = \boldsymbol{n} + \mathbb{k} - j_s)}^{(n_s - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} j_{ik}+1
$$

$$
(n_{ik} - j^{sa}-\mathbb{k}_2)\ n_{sa} - j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i -}{(j_s - 2)!\,(n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{n_{is} - n_{ik}}{(j_{ik} - j_s - 1)!\,(n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)!\,(n_{sa} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}
$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)!\,(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}}{(j_{ik}-j_s}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+j_{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{n_{sa}-n_s}{(j_i-j^{sa}-1)!\,(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{{}_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ \ )} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+$ $-s=$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots$ $a\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{(\ )}\sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{n}\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i}\sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(\boldsymbol{l}-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-j_{sa}^{ik})!\cdot(j^{sa}+j_s-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l}+\boldsymbol{n}-D}^{j_{ik}-\boldsymbol{l}+1}\sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(-j_i)!}$$

$$\sum_{=\boldsymbol{l}}^{(}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-}$$

$$\boldsymbol{l_{i}}-\boldsymbol{l}-j_{sa}^{ik}+1$$

$$\sum_{k=j^{sa}+j_{sa}^{ik}-}\ \sum_{(j^{sa}=j_i+-\boldsymbol{l_i})\ j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}}$$

$$-j_s+1)$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+j_s+1)\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \boldsymbol{n} \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \le j_s \le j_{i} - j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \le j_{ik} \le j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik} - j_{sa}^{ik} \le j^{sa} \le j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \ge \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l}}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l}}^{(\ )} \sum_{+\boldsymbol{n}+s}^{\boldsymbol{l}-\boldsymbol{l}} D-j_{sa}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{\mathbb{k}-j_s+1)}^{(n_i-j_s} \sum_{\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-} 1
$$

$$
\sum_{(n_{sa}=}^{+j_{ik}-} \sum_{sa}+1) \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \quad)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=}^{(n_{ik}+j_{ik}} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}-j_i}$$

$$\frac{(n_i - n_{i}$$

$$\frac{(n_{is}$$

$$\frac{(n_{ik} - n_{s}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_{ik} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\,(\boldsymbol{n}-j^{sa}}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1$ $j_{ik} \leq j^{sa}$ $_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge$ $+ s - j_{sa} \leq$ $\boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$ $+ j_{sa} - s =$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} -$ $_{sa}^{s} = j_{sa}^{ik} -$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots$ $, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} =$ $+ \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GULDUNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{s}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{+j_i-1)!\,(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l}-1)}{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}}$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j_i}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{s}}^{(j_{ik}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

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$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s, j_{ik}, \text{[illegible]}} = \sum_{\text{[illegible]}} \sum_{(j_s = \text{[illegible]} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik} = \text{[illegible]} \boldsymbol{l_s} + \boldsymbol{n} + j_{sa}^{ik} - D - 1}^{j^{sa} + j_{sa}^{ik} - \text{[illegible]}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\text{[illegible]} j_{sa} - \boldsymbol{l})} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i \text{[illegible]} s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}} \text{[illegible]})}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa}^{ik} - D - 1}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = \boldsymbol{l_s} + j_{sa} - \boldsymbol{l} + 1 \text{[illegible]})}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{\text{[illegible]} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k} \text{[illegible]}}^{n} \sum_{\text{[illegible]} = \boldsymbol{n} \text{[illegible]} + 1)}^{(n_i - j_s + \text{[illegible]}} \sum_{n_{ik} \text{[illegible]} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \text{[illegible]}}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - \text{[illegible]} + 1)}^{(\text{[illegible]} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{\text{[illegible]} j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - \text{[illegible]})! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(\text{[illegible]}_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\text{[illegible]} j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-j_i-\boldsymbol{n}-j^{sa})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}-1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j_i \leq j_i+j_{sa}-s \wedge j^{sa}+j_{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \leq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa} \geq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}-0 \wedge$

$j_{sa} \leq j_{sa}^{ik}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge s > s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)!\,(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}}{(j_{ik}-j_{}}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+j_{}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{}{(j_i-j^{sa}-1)!\,(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\boldsymbol{l_{ik}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{\boldsymbol{k}=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{s}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{i_s \ldots j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{\boldsymbol{l_{sa}} + \boldsymbol{n} + \cdots - D - j_{sa} - 1}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-_{k}-j_{sa}\right)!}$$

$$\frac{(D}{(D+j_{}\boldsymbol{n}-\boldsymbol{l_i})!\cdot(}+$$

$$\sum_{}^{(\ )}\sum_{\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{j^{sa}+j_{sa}^{ik}-D-j_{sa}}^{(\boldsymbol{l_{sa}}}\ \sum_{(j^{sa}}^{}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n_{}}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{}-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j^{sa} = \boldsymbol{l_{sa}} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_i = \boldsymbol{n} + \mathbb{k} - j_{sa})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{sa} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{sa} + j_{ik} - j^{sa} - j_{sa})}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + \boldsymbol{n} - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} = \boldsymbol{l_s} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j_{sa}+1)}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}+\mathbb{k}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}+j_s-n_{ik}-1)!}{(j_{ik}-j_s+1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}+1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{sa} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - \quad)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - \quad\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \quad - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{D} - \boldsymbol{l_i})!}{(\boldsymbol{n} - \boldsymbol{l_i} - \quad)! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{k=\boldsymbol{l}} \quad \sum_{\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l}} \quad \sum_{-\boldsymbol{l}+1)} \quad \sum_{j_{ik}+j_{sa}-j_{sa}^{ik})} \quad \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \quad \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \quad \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}\sum_{(j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{n}-j_s+1)}\sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}}^{(\boldsymbol{n}-j_s+1)}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(\boldsymbol{n}-j_s+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\boldsymbol{n}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s-\mathbb{k}_1)}^{(\boldsymbol{n}-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\boldsymbol{n}-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\boldsymbol{n}-j_s+1)}\sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\boldsymbol{n}-j_s+1)}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{sa}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{+1)}^{n_{is}+j_s} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{-\mathbb{k}_1} \sum_{-j_{ik}+1}^{}
$$

$$
\sum_{}^{(n_{ik}+j_{ik}-j} \sum_{\mathbb{k}_2)}^{} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{sa}+j^{sa}-j_i} \sum_{-j_i+1}^{}
$$

$$
\frac{(n_{is}-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{(n_s}{(n_s+j_i}$$

$$\frac{(\boldsymbol{l_s}}{}$$

$$\frac{(D}{(D+}$$

$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

$$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s}$$

$$D$$

$$j_{sa}$$

$$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}$$

$$s > 4 \wedge \boldsymbol{s} =$$

$$\mathbb{k}_2$$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{sa} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_i}-\boldsymbol{l_{sa}})}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(\boldsymbol{n} - \boldsymbol{l_i} - (\boldsymbol{n} - j_i)!}$$

$$\sum_{\boldsymbol{l}} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$(\boldsymbol{l_{ik}} + j_s - \boldsymbol{l} - j_{sa}^{ik} + 1)$$

$$\sum_{j_{ik} = } \sum_{(\boldsymbol{n} + j_{sa} - D - s)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{\boldsymbol{i} = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ \ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

GÜLDÜNYA

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{[illegible]} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})} $$

$$ \sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - [illegible]}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{[illegible]^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + [illegible] - D - s)}^{[illegible] + j_{sa} [illegible]} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}} $$

$$ \sum_{[illegible]\boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = [illegible] - j_s + 1)}^{[illegible] - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} $$

$$ \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot $$

$$ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot $$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}}}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum^{(\ )} \left(j^{sa} = j_{ik} + j_{sa} - j_{sa}\right) \sum j^{sa} - \boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum^{(n_i - j_s + 1)} \sum n_{ik} = \sum j_s - j_{ik} - \mathbb{k}_1$$

$$\sum_{(n_{sa} = \ + j_{ik} - j^{sa} \ )} \sum n_s = n_{sa} + j^{sa} - j_i$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + \ - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \ D - \boldsymbol{n} \ 1 \wedge$

$D + \ + s - \boldsymbol{n} - \boldsymbol{l_i} \ 1 \leq \boldsymbol{l} \leq \ - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j \ - j_{sa}^{ik} + 1 \ s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \ - j_{sa}^{ik} \leq j \ \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \ = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{n} \ \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

GULDUNYA

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{\boldsymbol{n}+\mathbb{k}}^{n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1} j_{ik}+1
$$

$$
(n_{ik}+ \quad j^{sa}-\mathbb{k}_2)\ n_{sa}+ \quad j_i
$$

$$
\sum_{\boldsymbol{n}-j^{sa}+}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)\ (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{s - n_{ik}}{(j_{ik} - j_s - 1)\ (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{ - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s \quad)!}{(n_s+j_i \quad -j_{sa}^{s})!\cdot(\quad j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s} \quad \boldsymbol{l}-1)!}{\quad j_i-\boldsymbol{l}+\quad)!\cdot(j_s-2)!}$$

$$\frac{(D-\quad}{(D+j \quad \boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D \quad +1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j \quad j_{sa}^{ik}-1 \leq j_{ik} \quad j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa} \quad s \wedge j^{sa}+s \quad j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}-\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \quad \boldsymbol{l_{ik}} \wedge \quad +j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \quad \boldsymbol{n}<n \wedge \quad =\mathbb{k}>0$

$j_{sa} \quad j_{sa}^{i}-1 \wedge j_{sa}^{ik} \quad j_{sa}-1 \quad =j_{sa}^{ik}-1 \wedge$

$\quad :\left\{j_{sa}^{s}, \mathbb{k} \quad j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa} \quad \cdots, j_{sa}^{i}\right\} \wedge$

$s>4 \wedge \boldsymbol{s}=s \quad \mathbb{k} \wedge$

$\mathbb{k}_2 \quad =2 \quad \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

GULDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j^{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\quad\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\quad+j_{sa}^{ik}-\quad-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(\boldsymbol{n}-\boldsymbol{l_i}-\quad)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\quad}^{(\quad-1)}\ \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{(j_{ik}=j_s+\boldsymbol{l_i}-\quad)}\ \sum_{(\quad+j_{sa}-j_{sa}^{ik})}^{(\quad)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})} \sum^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - \cdots - j_{sa} + 1} \sum_{j_i = \boldsymbol{l_{sa}} + \boldsymbol{n} + s - D - j_{sa}}$$

$$\sum^{n} \sum_{\boldsymbol{n} + \mathbb{k}\ (n_{is} = \cdots - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)} \sum_{n_s = \boldsymbol{n} - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\sum_{j_i=\boldsymbol{l_{ik}}+s-j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_i=\boldsymbol{n}+\mathbb{k}-j_{sa})}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+j_{ik}-j^{sa}-j_{sa})}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+\boldsymbol{l_s}-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+\boldsymbol{n}-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{\boldsymbol{n}-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j_{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - j_s)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=\boldsymbol{n}+j^{sa}-j_i}$$

$$\frac{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{n})!}{(D+j_s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{sa}-j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}+\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}-\boldsymbol{l_{ik}} \wedge j_{ik}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{n}=\mathbb{k} > 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}^{s}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s}=\mathbb{k}_1+\mathbb{k}_2 \wedge$

$\mathbb{k}_2 \geq 0 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(\boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{\boldsymbol{l}} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{(j_{sa} = j^{sa} + j_{sa} - \boldsymbol{l})} \sum_{(\boldsymbol{l_{sa}} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n} \sum_{(\boldsymbol{n} = \boldsymbol{n} + \mathbb{k})} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ \ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq \boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq \boldsymbol{n}<n\wedge I=\Bbbk>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\Bbbk_1,j_{sa}^{ik},\cdots,\Bbbk_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>4\wedge \boldsymbol{s}=s+\Bbbk\wedge$

$\Bbbk_z\colon z=2\wedge \Bbbk=\Bbbk_1+\Bbbk_2\Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{[illegible]}\sum_{(j_s=[illegible]+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-[illegible]^{ik}[illegible])}$$

$$\sum_{j_{ik}=j_s+[illegible]\boldsymbol{l_s}}^{[illegible]}\sum_{(j^{sa}=[illegible]\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}[illegible])}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{[illegible]}$$

$$\sum_{[illegible]+\Bbbk}^{n}\sum_{(n_{is}=[illegible]\Bbbk-j_s+1)}^{([illegible]-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 2\right)} \sum_{\left(j_s = \boldsymbol{l_{sa}} + \boldsymbol{n} - D - j_{sa} + 1\right)}$$

$$\sum_{j_{ik} = j_s + \boldsymbol{l_{ik}} - \boldsymbol{l_s}} \sum_{\left(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}\right)} \sum_{} \boldsymbol{l_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{\left(n_i - j_s + 1\right)} \sum_{n_{ik} = j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{\left(n_{sa} = j_{ik} - j^{sa}\right)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s}$ $D - \boldsymbol{n}$ $\wedge$

$D +$ $+ s - \boldsymbol{n} - \boldsymbol{l_i}$ $\leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1$ $j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

j_{ik} $- j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} +$ $= \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$\wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} j_{ik}+1
$$

$$
(n_{ik} - j^{sa}-\mathbb{k}_2)\ n_{sa} - j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i -}{(j_s - 2)!\,(n_i - n_{is} - j_s + 1)!}\cdot
$$

$$
\frac{n_{is} - n_{ik}}{(j_{ik} - j_s - 1)!\,(n_{is} + j_s - n_{ik} - j_{ik})!}\cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)!\,(n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)!\cdot(n_{sa} + j^{sa} - n_s - j_i)!}\cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)!\cdot(\boldsymbol{n} - j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)!\cdot(j_s - 2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})!\cdot\left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!}\cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})!\cdot(\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}
$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s+j_i-j^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{n})!}{(D+j_s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_s \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} - 1 \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_{ik}} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \boldsymbol{n} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_1, j_{sa}, \cdots, j_{sa}\}$

$s > 4 \wedge \boldsymbol{n} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ \ )}\ \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} -$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{\quad - 1)!}{(n_s + \quad - \boldsymbol{n} - 1)$$

$$\frac{(\quad - \boldsymbol{l} - 1)!}{\quad - j_s - \boldsymbol{l}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(D$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_{sa}^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = \boldsymbol{l_s} + \boldsymbol{n} - D)}$$

$$\sum_{(j_{ik} = j^{sa} + \boldsymbol{l_{sa}})} \sum_{(j^{sa} = \boldsymbol{l_i} + j_{sa} - D - s)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l}}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}^{} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{n_i-j_s} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{ik}+j_{ik}-j} \sum_{n_s=\boldsymbol{n}-j_i+1}^{(n_{ik}-n_{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-}$$

$$\frac{(n_s-)!}{(n_s-j_i-\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} \wedge 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \wedge \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} - j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{s} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_1 + \mathbb{k}_2, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,\, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s\quad)!}\cdot$$

$$\frac{(n_s\quad-1)!}{+j_i\quad-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s\quad\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\quad-j_{sa}^{ik}+1)!}{(j_s+\quad-j_{ik}-\boldsymbol{l}\quad)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-S}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\quad)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{\epsilon z}S_{j_{sa}, j_{sa}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = \boldsymbol{l_s} + \boldsymbol{n} - D)}^{(\boldsymbol{l_i} + \boldsymbol{n} - D - s)}$$

$$\sum_{\boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{l_i} + j_s^{ik} - \boldsymbol{l} - s + 1} \sum_{(j^{sa} = j_{ik} + \boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(}+$$

$$\sum_{k=}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{}^{(D-s+1)}$$

$$\sum_{k=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-1}\ \sum_{(j^{sa}-j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{}+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{\left(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s}\right)! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} (j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_i-j_s+1)} \sum_{n_{ik}=} j_s-j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=} \sum_{j_{ik}-j^{sa}} n_s=n_{sa}+j^{sa}-j_i$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} - D - \boldsymbol{n} - 1 \wedge$

$2 \leq \boldsymbol{l} \leq j_{ik} - j_{sa}^{ik} + \boldsymbol{l_{sa}} \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} - \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \mathbb{k} > 0 \wedge$

$< j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ \ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j}^{\boldsymbol{l_s}+s-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}} \sum_{-j_{ik}+1}^{\ }
$$

$$
(n_{ik}+j_{ik} \quad \mathbb{k}_2)\ n_{s} \quad {}^{sa}-j_i
$$

$$
\sum_{(n_{sa}=}^{\ } \sum_{sa}+1) \quad n_s=\boldsymbol{n}-j
$$

$$
\frac{(n_i - n_{i} - 1)!}{(j_s - 2)! \cdot (\quad n_{i} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} \quad n_{ik} - 1)!}{(j_{ik} - j_s \quad 1)! \cdot (n_{is} \quad j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_s \quad \mathbb{k}_2 - 1)!}{{}^{sa} - j_{ik} \quad 1)! \cdot (n_{ik} \quad j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{ - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ \ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{sa} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s - \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = {}^{ik}_{sa} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = \boldsymbol{l_s} + \boldsymbol{n} - D)}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{s} - 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s} - 1)! \cdot (j_{ik} - j_s - \boldsymbol{l} + 1)!} \cdot$$

$$\frac{(\boldsymbol{D} - \boldsymbol{l_i})!}{(\boldsymbol{n} - \boldsymbol{l_i} - 1)! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{=j^{sa}+\boldsymbol{l_i}} \sum_{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\quad)}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-j_i)}^{(\quad)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(\quad)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}-j_s}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_s)}^{(\quad)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\quad)}$$

$$\sum_{(n_{sa}=n_{ik}+j^{sa}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\quad)}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} \wedge \boldsymbol{l_s} > D - \quad + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} - j_{sa} + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{+\mathbb{k}_2}^{n_{is}+} \sum_{j_{ik}+1}^{-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{} \sum_{n_{sa}+j_i}^{}
$$

$$
\sum_{-j^{sa}+1}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is}}{j_s - 2)!\cdot(n_i - n_{is} - j_s + 1)!}\cdot
$$

$$
\frac{-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{-\mathbb{k}_2-1)!}{(j^{sa}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)\,(n_i - n_{is}}$$

$$\frac{(n_{is} - n_{ik}}{(j_{ik} - j_s}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)\,(n_{ik} + j_{sa} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)!\,(n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l}$$

$$(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} +$ $- s = \boldsymbol{l}$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik}$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots$ $a\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_s\ , j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l}_s-\boldsymbol{l}-1)!}{(\boldsymbol{l}_s-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l}_{ik}-\boldsymbol{l}_s-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l}_{ik}-\boldsymbol{n}-D-1)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l}_i-1)!}{(D+j_i+\boldsymbol{n}-\boldsymbol{l}_i)!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l}_s-\boldsymbol{l}-1)}\sum_{(j_s=\boldsymbol{l}_{sa}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{\boldsymbol{l}_{sa}}^{j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1}\sum_{j_{ik}=}^{j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l}_{sa}-\boldsymbol{l}_{ik})}^{(\ )}\sum_{j_i=j^{sa}+\boldsymbol{l}_i-\boldsymbol{l}_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=}^{(\boldsymbol{l_s}-\boldsymbol{l}-} \sum_{=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}}$$

$$\sum_{j_{ik}=j_s}^{(\quad)} \sum_{+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})\ j_i-}^{\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\ (n_{is}=\boldsymbol{n}+}^{-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \quad n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_i \quad j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$\quad\quad j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{\ldots+s+\boldsymbol{n}\ldots-j_{sa}^{ik}}^{\boldsymbol{l_s}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\ldots}^{n} \sum_{\ldots-j_s+1)}^{(n_i-j_s\ldots)} \sum_{\ldots\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}\ldots}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}\ldots+1)}^{\ldots+j_{ik}-j\ldots} \sum_{n_s=\boldsymbol{n}-j_i+1}^{\ldots j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \ldots)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\ldots - \ldots_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$(n_{ik}+j_{ik}$$

$$\sum_{(n_{sa}=$$

$$\frac{(n_i - n_{i}$$

$$\frac{(n_{is}$$

$$\frac{(n_{ik} - n_s$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=\boldsymbol{l_{ik}}+s+\boldsymbol{n}-D-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-)!}$$

$$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\ \ j_{ik}\leq j^{sa}\ \ _{sa}^{ik}-j_{sa}$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge\ +s-j_{sa}\leq\ \ \boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\ \ +j_{sa}-s=\ \ \wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\ \ _{sa}^{s}=j_{sa}^{ik}-1$$

$$\boldsymbol{s}\colon\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots\ \ ,j_{sa},\cdots,j_{sa}^{i}\}\wedge$$

$$s\geq 4\wedge\boldsymbol{s}=\ \ +\mathbb{k}\wedge$$

$$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\ \ +\mathbb{k}_2\Rightarrow$$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\ \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!} \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!} \frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot \frac{(\boldsymbol{l_{ik}}-\quad-j_{sa}^{ik}+1)!}{(j_s+\quad-j_{ik}-\boldsymbol{l}\quad)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad\boldsymbol{l}-1)}{(\boldsymbol{l_s}-\quad-\boldsymbol{l}+1)\quad-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}+1)!}{(j_s+\boldsymbol{l_{ik}}-\quad)!\cdot(j_{ik}-\quad-j_{sa}^{ik}+1)!}$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

GÜLDÜNYA

$2 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{Z\ldots}(j_{ik}\ldots) = \sum_{\ldots} \sum_{(\ldots \boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+\ldots)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}\ldots} \sum_{(j\ldots j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i\ldots+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}}}^{(\ )}\sum_{j^{sa}\ldots-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\ldots=\ldots+1)}^{(n_i-j_s+\ldots}\sum_{n_{ik}\ldots+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-\ldots+1)}^{(\ldots+j_{ik}-j^{sa}-\mathbb{k}_2}\sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\ldots)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(\ldots_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(\ldots j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_{sa})!}{(n_s-\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n}$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}$

$j_{ik} +$ $- j_{sa}^{ik} \leq j$ $j_i + j_{sa} - s \wedge$ $- j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 >$ $\wedge \boldsymbol{l_{sa}}$ $- j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k}$

$\wedge j_{sa}^{ik} < j_s$ $\wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_s^s - \mathbb{k}_1, j_{sa}^{ik},$ $, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s}$ $s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2$ $\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

GUDUMYA

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i - 1)}{(j_s - 2) \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{i} - 1)!}{(j_{ik} - j_{} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{} - \mathbb{k}_2 - j_{}}{(j^{sa} - j_{ik} - 1) \cdot (n_{ik} + j_{} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_s + \quad - j_{ik} - \boldsymbol{l}\quad)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\quad)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz\boldsymbol{S}_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ \ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}\sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{\text{[illegible]}} \sum_{(j_s=\text{[illegible]}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{\text{[illegible]}} \sum_{(\text{[illegible]}\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D\text{[illegible]})}^{(\boldsymbol{l_i}+j_{sa}\text{[illegible]}-s+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{\text{[illegible]}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\text{[illegible]}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\text{[illegible]}+1)}^{\text{[illegible]}-j_s+\text{[illegible]}} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}\text{[illegible]}-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(\text{[illegible]}+j_{ik}-j\text{[illegible]}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-\quad)!}{(n_s-\quad-\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-\quad-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} \quad 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq \quad - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} \quad 1 \wedge j_s + j_{sa}^{ik} - 1 \quad j_{ik} - j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{s} \quad j^{sa} \leq j \quad j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \quad j_{sa}^{ik} + 1 > \boldsymbol{l_s} \quad + j_{sa}^{ik} \quad = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} \quad \wedge I = \mathbb{k} > \quad \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \quad j_{sa}^{ik} \quad - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} \quad s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

GUDUMYA

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)\,(n_i - n_{is}}$$

$$\frac{(n_{is} - n_{ik}}{(j_{ik} - j_s}$$

$$\frac{n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)\,(n_{ik} + j_{sa} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{a} - n_s - 1)!}{i - j^{sa} - 1)\,(n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\ \ )!} \frac{(D-\boldsymbol{l}_{\ \ }}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\ (\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{\ \ } \leq j^{sa} + j_{sa} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \ldots {}^{sa} + s - j_{\ \ } \leq j_i \leq \ldots \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l}_{\ \ } \wedge \boldsymbol{l_i} + j_{sa} - \ldots = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - \ldots j_{sa}^{s} = j_{sa} \ldots 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots j_{\ \ }\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \ldots \wedge$

$\mathbb{k}_z: z = 2 \wedge \ldots = \mathbb{k}_1 + \ldots \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)} \sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ \ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GULDUNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} -$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{\quad - 1)!}{(n_s + \quad - \boldsymbol{n} - 1)$$

$$\frac{(\quad - \boldsymbol{l} - 1)!}{\quad - j_s - \boldsymbol{l}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(D$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}}^{(\quad)} \sum_{(j^{sa} = j_i + \boldsymbol{l_{sa}} - \boldsymbol{l_i})}^{\boldsymbol{l_s} + s - \boldsymbol{l}} \sum_{j_i = \boldsymbol{l_{sa}} + \boldsymbol{n} + s - D - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{\dots}(\dots, j_{ik}, j^{sa}, \dots) = \sum_{\dots=\boldsymbol{l}}^{\dots(\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{\dots=j^{sa}+\dots}^{\dots(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{\dots=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\quad)}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(\quad)}\ \sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\quad)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}-j_s}^{(\quad)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\quad)}$$

$$\sum_{(n_{sa}=n_{ik}}^{(\quad)}\ \sum_{-j^{sa}-\mathbb{k}_2)\ n_s=n_{sa}+j^{sa}-j_i}^{(\quad)}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}\ \wedge\ \boldsymbol{l_s}>D-\ +1\ \wedge$

$D+\boldsymbol{l_s}+s-\ \ \boldsymbol{l_{ik}}\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\ \wedge$

$2\ \ j_s\leq\ \ -j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\ \wedge$

$j_{ik}+j_{sa}-\ \ ^{ik}_{a}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\ \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\ \wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\ \wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\ \wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=\ \ \ +\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{\ \ \ }
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-\ \ \ 1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-\ \ \ 1}^{n_{is}+j_s\ \ \ -\mathbb{k}_1}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{\ \ \ }_{\ \ \ }\ n_{sa})} \sum_{\ \ \ -j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_{\ \ \ } - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{\ \ \ } - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{\ \ \ } - n_{ik} - 1)!}{(j_{ik} - j_{\ \ \ } - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{\ \ \ } - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s \quad)!}{(n_s+j_i \quad -j_{sa}^{s})! \cdot (\quad jsa)!} \cdot$$

$$\frac{(\boldsymbol{l_s} \quad \boldsymbol{l}-1)!}{\quad j_i-\boldsymbol{l}+\quad)! \cdot (j_s-2)!}$$

$$\frac{(D-\quad}{(D+\quad \boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D \quad \boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j \quad j_{sa}^{ik}-1 \leq j_{ik} \quad j^{sa}+j_{sa} \quad j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa} \quad s \wedge j^{sa}+s \quad j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \quad \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \quad \boldsymbol{l_{ik}} \wedge \quad +j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \quad \boldsymbol{n} < n \wedge \quad = \mathbb{k} > 0 \quad$

$j_{sa} \quad j_{sa}^{i}-1 \wedge j_{sa}^{ik} \quad j_{sa}-1 \quad = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \quad j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa} \quad \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = \quad \mathbb{k} \wedge$

$\mathbb{k}_2 \quad = \quad \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j_i=\boldsymbol{l_{ik}}+\boldsymbol{n}+s-D-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s - \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+s+\boldsymbol{n}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = \boldsymbol{l_s} + \boldsymbol{n} - D)}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}}^{(\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1)} \sum_{(j^{sa} = \boldsymbol{l_{ik}} + \boldsymbol{n} + j_{sa} - D - j_{sa}^{ik})} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l}_s-\boldsymbol{l}-1)!}{(\boldsymbol{l}_s-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l}_{ik}-\boldsymbol{l}_s-j_{sa}+1)!}{(j_s+\boldsymbol{l}_{ik}-j_{ik}-1)!\cdot(j_{ik}-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l}_i)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l}_i)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l}_{ik}-\boldsymbol{l}_{sa}}^{(\boldsymbol{l}_s+j_{sa}-\boldsymbol{l})}\sum_{(j^{sa}=\boldsymbol{l}_{ik}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}\sum_{j_i=j^{sa}+\boldsymbol{l}_i-\boldsymbol{l}_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}_s-\boldsymbol{l}-1)!}{(\boldsymbol{l}_s-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l}_i)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l}_i)!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l}_s > D-\boldsymbol{n}+1 \wedge$

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$$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{j_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ -j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n}}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{j_{sa} = j_{ik} + \boldsymbol{l_{sa}} - \boldsymbol{l_i}}^{(\ )} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}^{(\ )}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} j_{ik}+1
$$

$$
(n_{ik}+ -j^{sa}-\mathbb{k}_2)\ n_{sa}+ -j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is}}{(j_s-2)\ (n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{{}_{is}-n_{ik}\ 1)!}{(j_{ik}-j_s-1)\ (n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{{}_{ik}-n\ -\mathbb{k}_2-1)!}{(j^{sa}\ -1)!\ (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{{}_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)!\,(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}}{(j_{ik}-j_s}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+j_{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{}{(j_i-j^{sa}-1)!\,(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\boldsymbol{l_{ik}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ \ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ \ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\,(\boldsymbol{n}-j^{sa}}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}<j_{sa}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=$ $+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l_{sa}} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} -$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{\quad - 1)!}{(n_s + \quad - \boldsymbol{n} - 1)$$

$$\frac{(\quad - \boldsymbol{l} - 1)!}{\quad - j_s - \boldsymbol{l}$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}$$

$$\frac{(\boldsymbol{l_i}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(\ )} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{\boldsymbol{l_s} + s - \boldsymbol{l}} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+j_{sa}-D-s-1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)!\cdot(n_i - n_{is} - j_s + 1)!}\cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)!\cdot(n_{is} + j_s - n_{ik} - j_{ik})!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)!\cdot(n_{sa} + j^{sa} - n_s - j_i)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right)}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l})!}{(D+j_{\boldsymbol{n}}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\quad j_i)!}+$$

$$\sum_{\quad}^{(\quad)}\sum_{\quad}^{\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j^{sa}+j_{sa}^{ik}-j_s}^{\boldsymbol{l_{ik}}+\boldsymbol{n}-D}\ \sum_{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik}+1)}^{(j^{sa}=\quad+j_{sa}-D-s)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{\quad}+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{\boldsymbol{k}=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_i}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \quad \sum_{}^{(\boldsymbol{l_{sa}}-1)} \quad \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n} \quad \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{} \quad \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{}^{} \quad \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

GÜLDÜNYA

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{}\sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s}^{}\mathbb{k}_1$$

$$\sum_{(n_{sa}=n_i}^{(\ )}\sum_{}^{}\sum_{}^{}+j^{sa}-j_i$$

$$\frac{j_s-j_{sa}^{s})!}{(n_j-j_i-\boldsymbol{n}+j_{sa}^{is})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\leq j_i+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j_i\leq j_i+j_{sa}-s\leq j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge\mathbb{k}=\mathbb{k}>\wedge$

$j_{sa}-j_{sa}^{s}=1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s>\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{}$$

GÜLDÜNYA

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{sa}-1)!\cdot(n_{is}+j_{sa}-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j_{ik}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-j^{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l_{sa}} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ \ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

GÜLDÜNYA

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = {}^{ik}_{sa} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_s})}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s - 1} \quad \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \quad \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\quad(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\quad\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\quad_{sa}+j_{sa}^{ik}-\quad-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}\quad s)!}{(j^{sa}+\boldsymbol{l_i}-\quad)!\cdot(j_i+\quad-j^{sa}-s)!}$$

$$\frac{(D-\boldsymbol{l_i}\quad}{(D+j_i\quad\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}}^{-\boldsymbol{l}+1}\quad_{sa}^{ik}-D-s}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right.}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}-\boldsymbol{l}+1}^{(\quad)}\ \sum_{\boldsymbol{n}+j_{sa}^{ik}-D-s\ (j^{sa}+j_{ik}+j_{sa}-j_{sa}^{ik})\ j_i=j^{sa}+s-j_{sa}}^{(\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\ (n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-\quad 1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_s=n_{sa}+j^{sa}-j_i}^{(\quad)}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<\ \wedge\ \boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s \ldots + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j \ldots + \boldsymbol{n}-D)}^{(\boldsymbol{l_s} \ldots \boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_i} \ldots D}^{\ldots \boldsymbol{l}+1}
$$

$$
\sum_{\ldots + \mathbb{k}}^{n} \sum_{(n_{is} \ldots \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} \ldots - j_{ik} + 1}^{\ldots + j_s - j_{ik} - \mathbb{k}_1}
$$

$$
\sum_{\ldots = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + \ldots j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{\ldots - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{\ldots_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}\ \sum_{\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-j_i-\boldsymbol{n}-j_{sa})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \leq \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_1, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i - 1)}{(j_s - 2) \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s + 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - j_{ik})!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\boldsymbol{l_{ik}} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+$ $-s>$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}<j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots a\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\cdots)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\boldsymbol{l}+1)!\cdot(\boldsymbol{l}-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\cdots)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\cdots)!\cdot(j^{sa}+j_{s}-j_{ik}-j_{sa})!}$$

$$\frac{(\boldsymbol{l_i}+\cdots-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-\cdots-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\cdots-\boldsymbol{l_i})!}{(D+\cdots-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\text{[illegible]})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\text{[illegible]}-j_{sa}\right)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-\text{[illegible]})!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-\text{[illegible]}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\text{[illegible]}}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j_s+\text{[illegible]}}\sum_{(\text{[illegible]}j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{\text{[illegible]}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

GÜLDÜNYA

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})} \sum$$

$$\boldsymbol{l_{ik}}- \quad \boldsymbol{l}+1) \quad \boldsymbol{l_i}-\boldsymbol{l}+1$$

$$\sum_{j_{ik}} \sum_{+\boldsymbol{n}-D\ (j} \sum_{\boldsymbol{l_{sa}}+\boldsymbol{n}-D)\ j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum^{n} \quad -j_s+1) \quad n_{is}+j_s-j_{ik}-\mathbb{k}_1$$

$$\sum_{\boldsymbol{n}+\mathbb{k}\ (n_{is}=} \quad -j_s+1)\ n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1$$

$$(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_i+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_i+j_{sa}-\boldsymbol{l_{ik}})} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{(\ )} \sum_{\boldsymbol{l_{ik}}+\boldsymbol{l_i}-j_s+1}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s-\mathbb{k}_1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

GÜLDÜNYA

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\mathbb{k}_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(j_i + j_{sa} - s)} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_{sa}} + s - \boldsymbol{l} - j_{sa} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )}\sum_{(j_s=j}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-1)}\ \sum_{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+2}$$

$$\sum_{n_i=\boldsymbol{n}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{a=\boldsymbol{n}-j^{sa}+1)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-j_i-\boldsymbol{n}-j_s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+j_{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 = \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

GÜLDÜNYA

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{}^{n_{sa}+j^{sa}-} \sum_{}^{\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - \quad - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} \quad + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{ik} - \mathbb{k}_1 \quad 1)!}{(j_{ik} - j_s - 1)! \cdot (n_i - n_{is} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s \quad 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot \frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!} \frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\} \wedge$

$s>5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{j_s,j_{ik},j_{sa},j_i}=\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{sa}=j_{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}-D-1)}^{(j_i+j_{sa}-s)}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\boldsymbol{l_i}-\boldsymbol{l_i})!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{l_i}-j_i)!}+$$

$$\sum_{j_{ik}}\sum_{j_{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)}\sum_{(j^{sa}}^{-j_{sa}^{ik}+1)}\sum_{(\boldsymbol{l_s}}^{(\boldsymbol{l_s}-\boldsymbol{l})}\sum_{\boldsymbol{n}+j_{sa}-D-1)}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )}\sum_{(j^{sa}=j_i+}\sum_{j_i=}^{\boldsymbol{l_s}+s-\boldsymbol{l}}\sum_{}^{\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(}^{(n_i-j_s+1)}\sum_{1)\,n_{ik}=}\sum_{+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=}\sum_{+j_{ik}-j^{sa}}\sum_{)\,n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}$ $D-\boldsymbol{n}$ $1\wedge$

$2\leq$ $\leq j_{ik}-j_{sa}^{ik}+$ $\wedge j_s+j_{sa}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}$ $^{ik}\leq j^{sa}\leq$ $+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}$ $^{ik}+1=$ $\boldsymbol{sa}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<$ $J=\mathbb{k}>0\wedge$

$<j^i$ $1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s>5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s\,,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-\boldsymbol{l}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{ik}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_{sa}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j^{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{ik}} + \boldsymbol{n} + j_{sa} - D - j_{sa}^{ik})}^{(\boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s - 1)} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}_{\boldsymbol{s}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-\cdots-s)!}\cdot$$

$$\frac{(\cdots-\boldsymbol{l_i})!}{\cdots-\boldsymbol{n}-\cdots!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\cdots=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}\cdots+j_{sa}^{ik}-j_{\cdots}}\ \sum_{\cdots\boldsymbol{n}+j_{sa}-D-s)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{sa}^{ik}+1)}$$

$$(\boldsymbol{l_{ik}} + j_{sa} - j_{sa}^{ik} + 1)$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(\quad -\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$(\quad j_s+1)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(\quad=\boldsymbol{n}+\mathbb{k}-j_s} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$)$$

$$\sum_{(n_{sa}=n_{ik}+} \sum_{-j^{sa}-\mathbb{k}_2)\ n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n}$ $\wedge\ \boldsymbol{l_s} > D -$ $+ 1 \wedge$

$2 \leq j_s \leq j_{ik}$ $j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

j_{ik} j_{sa} $\leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik}$ $= \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{(j^{sa}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}-D-1)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{\boldsymbol{n}+\mathbb{k}}^{n_{is}+} \sum_{j_{ik}+1}^{-j_{ik}-\mathbb{k}_1}
$$

$$
(n_{ik}+ \quad j^{sa}-\mathbb{k}_2)\ n_{sa}+ \quad j_i
$$

$$
\sum_{\boldsymbol{n}-j^{sa}+}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)\ (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is}\ \ ik - \mathbb{k}_1\ \ 1)!}{(j_{ik}\ \ j_s - 1)! \cdot (n_{i}\ \ + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{-n\ \ - \mathbb{k}_2 - 1)!}{(j^{sa}\ \ - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{{}_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_2-1)!}{(j_{ik}-j_s-1)!\,(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\,(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l}$$

$$(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+$ $-s>$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_s$ $, j_{sa}^{i}\} \wedge$

$s>5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\boldsymbol{l}+1)!\cdot(\boldsymbol{l}-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_s}-s)!}{(j^{sa}+\boldsymbol{l_i}-\boldsymbol{l}-j_{sa})!\cdot(j_i+\boldsymbol{l}-j^{sa}-s)!}\cdot$$

$$\frac{(D+\boldsymbol{n}-1)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}-j_{sa}^{ik}-D-s}^{\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{k=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+j_s-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}+j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \quad \sum_{(j^{sa}=j_{ik}+j_{sa}}^{(\ )} \quad \sum_{j_i=}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{j_s+1)}^{(n_i-j_s} \sum_{+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \quad)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\quad ik - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}-} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} + j_s - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{is} - j_{ik} + j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{ik} - n_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(n_{sa} - n_s - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-1)!\cdot(\boldsymbol{l}-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_{ik} + s - j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l} + j_{sa} - s > 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 < j_{sa}^{s} < j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\}$

$s \geq 5 \wedge \boldsymbol{s} = \boldsymbol{n} + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GULDUNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{s}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+\quad-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l}_i-j_i-\boldsymbol{l_s}\quad\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s -$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!}$$

$$\frac{(\quad \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \quad - \boldsymbol{l} + 1)! \cdot (\quad - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_s} - s)!}{(j^{sa} + \boldsymbol{l_i} - \quad)! \cdot (j_i + \quad - j^{sa} - s)!}$$

$$\frac{(D -$$

$$\frac{}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)}$$

$$\sum_{j_{ik} = \boldsymbol{l_i} + \boldsymbol{n}}^{j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\quad)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

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$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, \ldots, j_i} = \sum_{k=\ldots}^{\ldots} \sum_{\ldots+\ldots-j_{sa}+1)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\ldots=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i\ldots+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-}^{(\ )} \sum_{j_i=j^{sa}-j_{sa}}^{-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_i-j_s+1)}^{(n_i-j_s} \sum_{n_{is}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+j_{ik}-j^{sa}+1)}^{+j_{ik}-j^{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-j_i-\boldsymbol{n}-j^{sa})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \leq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{ik}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge s = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right) \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)!\,(n_i-n_{is}}$$

$$\frac{(n_{i}-n_{ik}-\mathbb{k}_{}}{(j_{ik}-j_s-1)!\,(}$$

$$\frac{(n_{ik}-n_{}-\mathbb{k}_2-1)}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+}$$

$$\frac{a}{(j_i-j^{sa}-1)!\,(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right) \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s\quad)!}\cdot$$

$$\frac{(n_s\quad 1)!}{+j_i\quad-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s\quad\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+\quad-\boldsymbol{l_{sa}}-s)!}{(j^{sa}\quad\boldsymbol{l_i}-j_i-\boldsymbol{l_s}\quad)!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{sa}^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\boldsymbol{l}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(\boldsymbol{l_i}-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{j_i=\boldsymbol{l_i}-D-s+1}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n}\sum_{(j_{ik}+j_{sa}-j_{sa})}^{(n_{is}+j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i}\sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}}^{(\ )} \sum_{j_i=j^{sa}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(\ +1)}^{(n_i-j_s+1)} \sum_{n_{ik}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}+j_{ik}-j^{sa}}^{)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_i} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq \boldsymbol{l_s} - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{ik}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_{sa}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\,(\boldsymbol{n}-j^{sa}}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D -$ $+ 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq$ $\leq j^{sa} + j_{sa}^{i}$ $j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} +$ $- j_{sa} \leq j_i \leq$ $\wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} +$ $- j_{sa} = \boldsymbol{l_{ik}}$ $\boldsymbol{l_i} + j_{sa}$ $\boldsymbol{sa} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{s}$ $\leq j_{sa} - 1 \wedge j_{sa}^{s}$ $j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}$ $_{sa}^{ik}, \cdots, \mathbb{k}$ $_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s +$

$\mathbb{k}_z : z$ $\wedge \mathbb{k} = \mathbb{k}_1 +$ $\Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}\ \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+\quad-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_s}\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa} - D - 1)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{\quad}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}}\quad(j_i+j_{sa}\quad-s)!}\cdot$$

$$\frac{(\boldsymbol{\quad}-\boldsymbol{l_i})!}{\quad-\boldsymbol{n}-\quad!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{\quad}=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\quad}^{\quad ik}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{\boldsymbol{\quad}=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum$$

$$\sum_{j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D} \sum_{(j^{sa} = j_{sa} - j_{sa}^{ik})} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}$$

$$\sum_{(n_{is} = \mathbb{k} - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)} \sum_{n_s = \boldsymbol{n} - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{}}^{(\ )}\ \sum^{j_{sa}^{}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_i-j_s+1)}\ \sum_{n_{ik}=}^{j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}^{j_{ik}-j^{sa}}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}$ $D-\boldsymbol{n}$ $1\wedge$

$D+$ $+s-\boldsymbol{n}-\boldsymbol{l_i}$ $1\leq\boldsymbol{l}\leq$ $-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{}-j_{sa}^{ik}+1\wedge$ $_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+$ $-j_{sa}^{ik}\leq$ $\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+$ $=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$>\boldsymbol{n}$ $\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s>5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-} \sum_{j_{ik}+1}^{-j_{ik}-\mathbb{k}_1}
$$

$$
(n_{ik}+ \quad -j^{sa}-\mathbb{k}_2)\ n_{sa}+ \quad -j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} \quad n_{ik} - \mathbb{k}_1 \quad 1)!}{(j_{ik} \quad j_s - 1)! \cdot (n \quad + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{n_{ik} - n \quad - \mathbb{k}_2 - 1)!}{(j^{sa} \quad - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}
$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s+j_i-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}_s-\boldsymbol{l}-1)!}{(\boldsymbol{l}_s-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{n})!}{(D+j_s-\boldsymbol{n}-\boldsymbol{l}_i)!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{ik}-j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}+\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}-\boldsymbol{l_{ik}} \wedge j_i+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{n}=\mathbb{k} > 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s}=\boldsymbol{s}+\mathbb{k} \wedge$

$\mathbb{k}_2 \wedge \boldsymbol{s}=\boldsymbol{s}+\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - \text{[illegible]}} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \text{[illegible]} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}}) \cdot (j_i + j_{sa} \text{[illegible]} - s)!} \cdot$$

$$\frac{(\text{[illegible]} - \boldsymbol{l_i})!}{\text{[illegible]} - \boldsymbol{n} - \text{[illegible]}! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{\text{[illegible]}} \sum_{(j_s = \boldsymbol{l_i} + \boldsymbol{n} - D - s + 1)}^{(\text{[illegible]} + 1)}$$

$$\sum_{j_{ik} = j_s + \text{[illegible]} - 1} \sum_{(j^{s\text{[illegible]}} \text{[illegible]}_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{\text{[illegible]} = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

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$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{} \left(j_s = j_{ik} \quad +1 \right)$$

$$\sum_{j_{ik}=\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j} \quad \left(\quad = j_i + j_{sa} - \right) \quad \sum^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1} \quad \sum^{\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \quad \sum_{(n_{is}=\quad \mathbb{k}-j_s+1)}^{(n_i-j_s \quad)} \quad \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n \quad -j_{ik}-j^{sa}-\mathbb{k}_2)} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

GÜLDÜNYA

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=\boldsymbol{l_{ik}}}^{\boldsymbol{l_i}-\boldsymbol{l}+1-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+1}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1+1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_i+1)}^{(n_{ik}+j_{ik}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_{is}-n_{is}-1)!}{(\quad-2)!\cdot(\quad-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\quad-\mathbb{k}_1-1)!}{(j_{ik}-\quad-1)!\cdot(n_{\quad}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{\quad}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

GÜLDÜNYA

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}^{} {}_{+j^{sa}-j_i}$$

$$\frac{(n_s \quad !}{(n_s+j_i \quad -j_{sa}^{s})! \cdot (\quad j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} \quad \boldsymbol{l}-1)!}{\quad j_s-\boldsymbol{l}+ \quad)! \cdot (j_s-2)!}$$

$$\frac{(D-}{(D+ \quad \boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j^{ik} \quad 1 \leq j_{ik} \leq \quad a + j_{sa}^{ik} - j \quad \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i \quad _{sa} - s \wedge j^{sa} \quad - j_{sa} \quad \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad _a > \boldsymbol{l_{ik}} \wedge \boldsymbol{l} \quad j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \quad > 0 \wedge$

$j_s \leq j_{sa}^{i} - 1 \quad _{sa}^{ik} < j_{sa} \quad 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{ \quad , \cdots, \mathbb{k}_1, j_{sa}^{ik}, \quad \mathbb{k}_2, j_{sa}, \quad \} \wedge$

$\quad > 5 \wedge \quad = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} \quad \mathbb{k}_{\quad} + \quad _2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} -$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{-1)!}{(n_s +$$

$$\frac{(\boldsymbol{l}_s - \boldsymbol{l} - 1)!}{(j_s - \boldsymbol{l}$$

$$\frac{(\boldsymbol{l}_{sa} + j_{sa}$$

$$\frac{(D - \boldsymbol{l}_i)!}{(D +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l}_i+\boldsymbol{n}-D}^{\boldsymbol{l}_s+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l}_s - \boldsymbol{l} - 1)!}{(\boldsymbol{l}_s - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l}_i)!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l}_i)! \cdot (\boldsymbol{n} - j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\mathbb{k}_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} - D}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_i} + j_{sa} - D - s)}^{(\boldsymbol{l_{ik}} - j_{sa} - \boldsymbol{l} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_i}^{j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{-\boldsymbol{l}-j_{sa}^{ik}}^{(\boldsymbol{l_i}+j_{sa}}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\ \sum_{=\boldsymbol{n}+\mathbb{k}-}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1}$$

$$\sum_{}^{+j_{ik}-j^{}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+ \quad -j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}+ \quad)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s - j_s}{(n_s - \boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D - j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} \quad 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \quad 1 \leq j_{ik} \leq \quad ^{a} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \quad - j_{sa}^{ik} \leq j^{ \quad } < j_i + j_{sa} - s \wedge j^{sa} \quad - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \quad \wedge \boldsymbol{l_{sa}} + \quad ^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \quad < n \wedge I = \mathbb{k} \quad 0 \wedge$

$j_{sa} \leq j_{sa}^{i} \quad 1 \wedge j_{sa}^{ik} < j_s \quad - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_s^s, \cdots, \mathbb{k}_1, j_{sa} \quad _2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} \quad s + \mathbb{k} \wedge$

$\quad \cdot z = 2 \quad \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

GUDUMYA

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1+1)!}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+j_{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{a}{(j_i-j^{sa}-1)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\quad + j^{sa} - n_s \quad)!} \cdot$$

$$\frac{(n_s \quad 1)!}{+ j_i \quad - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s \quad \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} \quad \boldsymbol{l_{ik}} - j_{sa}\right)!}{\quad + \boldsymbol{l_{sa}} \quad ^{sa} - \boldsymbol{l_{ik}})! \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{j_s,j_{ik},j_{sa},j_i}=\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-s-1}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-_{ik}-j_{sa}\right)!}$$

$$\frac{(D-\boldsymbol{l})!}{(D+j_{}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(-j_i)!}+$$

$$\sum_{}^{(\ )}\sum_{j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{\boldsymbol{n}+j_{sa}^{ik}-D-s\ (j^{sa}}^{(\boldsymbol{l_i}+j_{sa}-s+1)}\ \sum_{k}+j_{sa}-j_{sa}^{ik})\ j_i=j^{sa}+s-j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{}-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{}+j_{sa}-j_{sa}^{}}^{(\ )}\ \sum_{}^{}\ -j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{}^{(n_i-j_s+1)}\ \sum_{}^{}\ \sum_{}^{}\ -j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=}^{(\ )}\ \sum_{j_{ik}-j^{sa}-}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+\quad-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\quad D-\boldsymbol{n}+\quad\wedge$

$2\leq j_{}<j_{ik}-j_{sa}^{ik}+\quad j_s+j_{sa}^{}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-\quad\leq j^{sa}\leq\quad+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}\quad+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\quad=\mathbb{k}>0\wedge$

$\quad<j_{}\quad-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-1)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_{sa}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_{sa}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} \quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\int j_s, j_{ik}, j^{sa}, j_i = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\quad(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\quad\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\quad_{sa}+j_{sa}^{ik}-\quad j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{D}-\quad\boldsymbol{l_i})!}{\quad-\boldsymbol{n}-\quad\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\quad}^{(\quad+2)}\quad\sum_{j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_i}+\quad-\boldsymbol{l}-s+1)}\quad\sum_{=j_s+j_{sa}\quad-j_{ik}+j_{sa}-j_{sa}^{ik})\ j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j$$

$$(l_{ik}$$

$$\sum_{j_s=\boldsymbol{l_i}+\boldsymbol{n}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}$$

$$\sum_{j_{ik}=j_{ik}+j_{sa}-j_s$$

$$\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$(j_s$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=n_{ik}$$

$$\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\geq \boldsymbol{n} < \wedge \boldsymbol{l_s} > D - + 1 \wedge$

$2 \leq j_{ik} \leq j_{ik} - \quad (j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} j_{ik}+1
$$

$$
(n_{ik}+ \quad -j^{sa}-\mathbb{k}_2)\ n_{sa}+ \quad -j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is}}{(j_s-2)\ (n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is} \quad n_{ik}-\mathbb{k}_1-1)!}{(j_{ik} \quad j_s-1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{n_{ik}-n \quad -\mathbb{k}_2-1)!}{(j^{sa} \quad -1)!\ (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}
$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!} \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+$ $-s=$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_s$ $, j_{sa}^{i}\} \wedge$

$s>5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{(\ )}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{n}\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i}\sum_{n_s=\boldsymbol{n}-j_i+1}\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_{ik}-\boldsymbol{l}+1)!\cdot(\boldsymbol{l}-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-1)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l})!\cdot(j^{sa}+j_{sa}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}-1)!}{(D+j_i+\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(-j_i)!}$$

$$\sum_{=\boldsymbol{l}}^{(}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}}$$

$$\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+1$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-}\ \sum_{(j^{sa}=j_i+-s)\ j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}$$

$$-j_s+1)$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+j_s+1)\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{l} \quad n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{-} - j_{sa}^{ik}+1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+} \sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{+\boldsymbol{n}+s}^{\boldsymbol{l_s}-\boldsymbol{l}} -j_{sa}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{j_s+1)}^{(n_i-j_s} \sum_{+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s -)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(- j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}-} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_{\cdot}-n_{is}-1)!}{(j_s-2)!\cdot(n_i \quad j_s+1)!}\cdot$$

$$\frac{n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot n_{is}+j_s \quad n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{a-j_{ik}-1)!\cdot(n_{ik} \quad j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\,(\boldsymbol{n}-j^{sa}}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-}{(\boldsymbol{l_s}-j_s}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_{ik} + s - j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \quad + j_{sa} - s = \quad \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \quad j_{sa}^{s} < j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik} \quad \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{s}$

$s \geq 5 \wedge \boldsymbol{s} = \quad + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \quad + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}\ (\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GULDUNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!} \frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!} \frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l}-1)}{(\boldsymbol{l_s}-\boldsymbol{l}+1)(}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}}$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j_i}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}\sum_{j_{ik}=j}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

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$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S} \ldots = \sum \ldots \sum_{\ldots (j_s \ldots - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa}^{ik} - D - 1}^{j^{sa} + j_{sa}^{ik} \ldots} \sum_{(\boldsymbol{l_{sa}} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} \ldots - \boldsymbol{l})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_{is} \ldots + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa}^{ik} - D - 1}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = \boldsymbol{l_s} + j_{sa} - \boldsymbol{l} + 1)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{j_{sa} = j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_{ik} + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_2}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j_{ik} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{k_2)\ n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_{}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n}$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}$

$j_{ik} +$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k}$

$j_{sa} \leq j_{sa}^{i}$

$\boldsymbol{s}: \{j_s^s, \cdots, \mathbb{k}_1, j$

$s > 5 \wedge \boldsymbol{s}$

$\mathbb{k}_z: z = 2$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)!\,(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_}{(j_{ik}-j_s-1)!\,(}$$

$$\frac{(n_{ik}-n_{}-\mathbb{k}_2-1)}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+}$$

$$\frac{a}{(j_i-j^{sa}-1)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{k+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s\quad)!}\cdot$$

$$\frac{(n_s\quad 1)!}{+j_i\quad-1)!\,(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s\quad\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}\quad\boldsymbol{l_{ik}}-j_{sa})!}{+\boldsymbol{l_{sa}}\quad^{sa}-\boldsymbol{l_{ik}})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{i_s \ldots j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{\boldsymbol{l_s} + \boldsymbol{n} + j_{sa}^{ik} - D - 1}^{\boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa} - 1} \quad \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \quad \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \quad \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \quad \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \quad \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-_{k}-j_{sa}\right)!}$$

$$\frac{(\quad)!}{(D+j_{\quad}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\quad-j_i)!}+$$

$$\sum_{(\quad)}^{(\quad)}\sum_{j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{j_{sa}^{ik}-D-j_{sa}}^{(\boldsymbol{l_{sa}}\quad-1)}\ \sum_{(j^{sa}\quad+j_{sa}-j_{sa}^{ik})}^{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_{\quad s}+1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_{sa} = j_{sa} - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = n_{is} + \mathbb{k} - j_{sa} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{ik} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{sa} + j_{ik} - j^{sa} - j_{ik})}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + \boldsymbol{n} - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \geq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} + j_{sa} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{ik}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_{sa}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - \text{[illegible]}} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} \text{[illegible]}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \text{[illegible]}^{sa} + j_{sa}^{ik} - \text{[illegible]} j_{sa})!} \cdot$$

$$\frac{(D \text{[illegible]} \boldsymbol{l_i})!}{\text{[illegible]} - \boldsymbol{n} - \text{[illegible]} \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{k=\boldsymbol{l}} \sum_{\text{[illegible]}\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{\text{[illegible]}k=j_s+j\text{[illegible]}} \sum_{\text{[illegible]}j_{ik}+j_{sa}-j_{sa}^{ik})}^{\text{[illegible]}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{\text{[illegible]}n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}\sum_{(j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}-j_{sa}+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{n}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa})}^{(j_s+1)}\sum_{j_i=j^{sa}+s-j_{sa}}^{(\boldsymbol{n}-j_s+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\boldsymbol{n}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s-j_{sa})}^{(\boldsymbol{n}-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\boldsymbol{n}-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\boldsymbol{n}-j_s+1)}\sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\boldsymbol{n}-j_s+1)}$$

$$\frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{sa}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^i-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^s<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^s,\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^i\right\}\wedge$

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$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+1}^{(n_{ik}+j_{ik}-j_{ik}-\mathbb{k}_2)} \sum_{-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_{is}-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(n_{ik}-j_s-1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{\ }{\ }} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{\ }{\ }} \sum_{n_s=}$$

$$\frac{(n_s}{(n_s+j_i}$$

$$\frac{(\boldsymbol{l_s}}{}$$

$$\frac{(D}{(D+}$$

$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

$$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s}$$

$$D$$

$$j_{sa}$$

$$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2$$

$$s > 5 \wedge \boldsymbol{s} =$$

$$\mathbb{k}_2$$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{\binom{\ }{\ }} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\binom{\ }{\ }} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{sa} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{\boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = \boldsymbol{n} + j_{sa}^{ik} - \boldsymbol{l} + 1} \sum_{(j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{[illegible]} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{[illegible]} \sum_{j_i = j^{sa} + s - j_{sa}}^{j_{sa} - [illegible]} \sum_{[illegible]} \sum_{(n_{is} = [illegible] - j_s + 1)}^{n} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot $$

$$ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot $$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j^{sa} = j_{sa} - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_{is})}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + j_{ik} - j^{sa} - \mathbb{k}_1)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + \boldsymbol{l_s} - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_i} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{n} = n + \mathbb{k} \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \qquad n_{is}+\qquad -j_{ik}-\mathbb{k}_1
$$

$$
\qquad\qquad +\mathbb{k}_2 \qquad\qquad j_{ik}+1
$$

$$
(n_{ik}+j \qquad j^{sa}-\mathbb{k}_2)\ n_{sa}+j \qquad\qquad j_i
$$

$$
\sum_{-j^{sa}+1} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is}}{j_s - 2)!\cdot(n_i - n_{is} - j_s + 1)!}\cdot
$$

$$
\frac{(n_{is} - \quad ik - \mathbb{k}_1 \quad 1)!}{(j_{ik} \quad j_s - 1)!\cdot(n_i + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}\cdot
$$

$$
\frac{- \quad - \mathbb{k}_2 - 1)!}{(j^{sa} \quad - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{i - j^{sa} - 1)!\cdot(n_{sa} + j^{sa} - n_s - j_i)!}\cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)!\cdot(\boldsymbol{n} - j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)!\cdot(j_s - 2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})!\cdot\left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!}\cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})!\cdot(\boldsymbol{n} - j_i)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s \quad)!}{(n_s+j_i \quad -j_{sa}^{s})!\cdot(\quad jsa)!}\cdot$$

$$\frac{(\boldsymbol{l_s} \quad \boldsymbol{l}-1)!}{\quad -\boldsymbol{l}+\quad)!\cdot(j_s-2)!}$$

$$\frac{(D-\quad}{(D+j \quad -\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D \quad +1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j \quad j_{sa}^{ik}-1 \leq j_{ik} \quad j^{sa}+j_{sa} \quad j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa} \quad s \wedge j^{sa}+s \quad j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \quad \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \quad \boldsymbol{l_{ik}} \wedge \quad +j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \quad \boldsymbol{n} < n \wedge \quad =\mathbb{k}>0$

$j_{sa} \quad j_{sa}^{i}-1 \wedge j_{sa}^{ik} \quad j_{sa}-1 \quad \quad < j_{sa}^{ik}-1 \wedge$

$\quad :\{j_{sa}^{s}, \quad \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2 \quad sa, \cdots, j_{sa}^{i}\} \wedge$

$s>5 \wedge \boldsymbol{s}=\quad \mathbb{k} \wedge$

$\mathbb{k}_2 \quad =2 \quad \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz S_{j_s,\,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j_{ik}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-j^{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\ } \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\quad+j_{sa}^{ik}-\quad-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(\boldsymbol{n}-\boldsymbol{l}_{\quad})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{(\quad)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{(j_{ik}=j_s+j_{\quad})}^{(\quad)}\sum_{(j_i=j^{sa}+s-j_{sa}+j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{\boldsymbol{n}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} $$

$$ \sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_{sa}} + \boldsymbol{n} + s - D - j_{sa}}^{\boldsymbol{l_{sa}} + \boldsymbol{n} + s - j_{sa} + 1} $$

$$ \sum_{\boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(\ - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} $$

$$ \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot $$

$$ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot $$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=\boldsymbol{l_{sa}}}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=n+\mathbb{k}-j_{sa}+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{sa}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{sa}+j_{ik}-j^{sa}-1)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+\boldsymbol{l_s}-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{}^{n_{is}+\mathbb{k}_1-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{}^{n_{sa}+j^{sa}+\mathbb{k}_2-j_i}
$$

$$
\sum_{-j^{sa}+1}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)!\cdot(n_i - n_{is} - j_s + 1)!}\cdot
$$

$$
\frac{(n_{is} - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)!\cdot(n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}\cdot
$$

$$
\frac{-\mathbb{k}_2 - 1)!}{(j^{sa} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{i - j^{sa} - 1)!\cdot(n_{sa} + j^{sa} - n_s - j_i)!}\cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)!\cdot(\boldsymbol{n} - j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)!\cdot(j_s - 2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})!\cdot\left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!}\cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})!\cdot(\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=\boldsymbol{n}+j^{sa}-j_i}$$

$$\frac{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{n})!}{(D+\boldsymbol{l_s}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{sa}-j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}+\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}-\boldsymbol{l_{ik}} \wedge j_i+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \mathbb{k} > 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j^{sa} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = \boldsymbol{s} + \mathbb{k} \wedge$

$\mathbb{k}_2 = \boldsymbol{n} + \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{sa} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa}^{ik} - D - 1}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s -$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!}$$

$$\frac{(\quad \boldsymbol{l} - 1)}{(\boldsymbol{l_s} - \quad - \boldsymbol{l} + 1)} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} \quad)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} \quad (j^{sa} + j_s \quad - j_{ik} - j_{sa})!}$$

$$\frac{(D - \boldsymbol{l_i})}{(D + j_i \quad \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}} \sum_{^{sa} + j_{sa}^{ik} - j_{sa}}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

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$$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \le \boldsymbol{l} \le D - \boldsymbol{n} + 1 \wedge$$

$$2 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$$

$$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{\sim} j_{ik}, j^{sa}, j_i \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}} \; j_{sa}^{ik}+2)}$$

$$\sum_{j_i \; + j_{sa}^{ik}-1} \; \sum_{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+} \; \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \; \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \; \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \; \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} =$$

$$\sum_{k=\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 2)} \sum_{\boldsymbol{l_{sa}} + \boldsymbol{n} - D - j_{sa} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(\boldsymbol{l_{sa}} - j_{sa} + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_s}^{(\boldsymbol{l_{ik}} - j_{sa} + 2)} \sum_{j_i = j^{sa} + s - j_{sa}}^{(\boldsymbol{l_{sa}} - j_{sa} + 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{(\boldsymbol{n} - j_s + 1)} \sum_{n_{is} = \boldsymbol{n} + \mathbb{k} - j_s}^{(\boldsymbol{n} - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(\boldsymbol{n} - j_s + 1)}$$

$$\sum_{n_{sa} = n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2)}^{(\boldsymbol{n} - j_s + 1)} \sum_{n_s = n_{sa} + j^{sa} - j_i}^{(\boldsymbol{n} - j_s + 1)}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_{sa}} \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

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$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=\boldsymbol{n}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-\mathbb{k}_1}
$$

$$
\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}
$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s+j_i-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{n})!}{(D+j_s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} - 1 \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_{ik}} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \boldsymbol{n} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}\} \wedge$

$s > 5 \wedge \boldsymbol{n} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j^{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

GÜLDÜNYA

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{sa}=j^{sa}+j_{sa}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = \boldsymbol{l_s} + \boldsymbol{n} - D)}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_s} + j_{sa} - \boldsymbol{l} + 1)}^{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l} - s + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}_1}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k}_1 - j_s + 1)}^{n_i - j_s + 1} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}+\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_{sa})!}{(n_s-\boldsymbol{n}-j_{sa}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n}$ $1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}$ $1 \leq j_{ik} \leq$ $^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} +$ $- j_{sa}^{ik} \leq j$ $\leq j_i + j_{sa} - s \wedge$ $^{sa} +$ $- j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 >$ $\wedge \boldsymbol{l_{sa}}$ $^{ik} - j_{sa} \geq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq$ $< n \wedge I = \mathbb{k}$ $0 \wedge$

$^{a} \leq j_{sa}^{i}$ $1 \wedge j_{sa}^{ik} < j_s$ $- 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_s^s, \cdots, \mathbb{k}_1, j_s$ $, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s >$ $5 \wedge \boldsymbol{s}$ $s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2$ $\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

GÜLDÜNYA

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - \quad - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} \quad + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{ik} - \mathbb{k}_1 \quad 1)!}{(j_{ik} - j_s - 1)! \cdot (n_i - n_{is} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{a - n_s \quad 1)!}{i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\quad-j_{sa}^{ik}+1)!}{(j_s+\quad-j_{ik}-\boldsymbol{l}\quad)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{\epsilon z}S_{j_{sa}, j_{sa}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = \boldsymbol{l_s} + \boldsymbol{n} - D)}^{(\boldsymbol{l_i} + \boldsymbol{n} - D - s)}$$

$$\sum_{\boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{l_i} + j_{sa}^{ik} - s + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\boldsymbol{l}+1)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{\boldsymbol{l_i}}\sum_{\boldsymbol{l_i}=(D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{sa}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-1}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j^{sa}=j_{sa}^{ik}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_i=\boldsymbol{n}+\mathbb{k}+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{sa}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{sa}+j_{ik}-j^{sa}-1)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_s - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} - \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}} \sum_{}^{n_{ik}-j_{ik}+1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}-} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{sa} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s - \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < {}_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = \boldsymbol{l_s} + \boldsymbol{n} - D)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa} - 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{j_i = j^{sa} + j_{sa} - \boldsymbol{l}}^{(\boldsymbol{l_i} - \boldsymbol{l} + 1)} \sum_{(j_{ik} = \boldsymbol{l_s} + j_{sa} - \boldsymbol{l} + 1)}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{(\boldsymbol{l_i} - \boldsymbol{l} + 1)} \sum_{j_s = \boldsymbol{l_s} + \boldsymbol{n} - D}^{\boldsymbol{n}} \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-j_{sa}-\boldsymbol{l})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{l} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{[illegible]+\mathbb{k}_2-j_{ik}+1}^{n_{is}+[illegible]-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{[illegible]-j^{sa}+[illegible]}^{(n_{ik}+j[illegible]j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j[illegible]j_i}
$$

$$
\frac{(n_i - n_{is} [illegible]}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - [illegible]_{ik} - \mathbb{k}_1 [illegible] 1)!}{(j_{ik} [illegible] j_s - 1)! \cdot (n_{i[illegible]} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{[illegible] - \mathbb{k}_2 - 1)!}{(j^{sa} - [illegible] - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{[illegible]_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{ik}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l}$$

$$(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} +$ $- s = \boldsymbol{l}$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik}$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_s$ $, j_{sa}^i\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l}_s-\boldsymbol{l}-1)!}{(\boldsymbol{l}_s-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l}_{ik}-\boldsymbol{l}_s-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l}_{ik}-\boldsymbol{n}-j_{sa}^{ik})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l}_i-1)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l}_i)!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l}_s-\boldsymbol{l}-1)}\sum_{(j_s=\boldsymbol{l}_{sa}+\boldsymbol{n}-D-j_{sa}+1)}^{}$$

$$\boldsymbol{l}_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1$$

$$\sum_{j_{ik}=}^{j_{sa}^{ik}-1}\quad\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ j_i=j^{sa}+s-j_{sa}\sum$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1\sum^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ n_s=\boldsymbol{n}-j_i+1\sum_{}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}\sum_{\boldsymbol{l_{sa}}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-1)}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-1)}\sum_{j_i=j_{sa}+j_s-j_{sa}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-1)}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_{is}-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{sa}-j_{sa}+1)}\sum_{n_s=n_{sa}+j^{sa}-j_i}^{(n_{sa}-j_{sa}+1)}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}+j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{\boldsymbol{l_s}+s+\boldsymbol{n}-j_{sa}^{ik}}^{\boldsymbol{l_s}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{(n_i-j_s+1)}^{(n_i-j_s)} \sum_{\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+j_{sa}+1)}^{+j_{ik}-j} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=}^{(n_{ik}+j_{ik}} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}-j_i}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+s+\boldsymbol{n}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-1)!\cdot(\boldsymbol{l}-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \wedge j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j_i+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_s}+j_{sa}-s = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^s < j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{ik}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = \boldsymbol{n}+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l} - j_{ik} - \boldsymbol{l} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad \boldsymbol{l}-1)}{(\boldsymbol{l_s}-\quad -\boldsymbol{l}+1)\quad -2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}+1)!}{(j_s+\boldsymbol{l_{ik}}-\quad)!\cdot(j_{ik}-\quad -j_{sa}^{ik}+1)!}$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j_i-\quad \boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_s^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

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$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{Z}[\ldots] = \sum_{\ldots} \sum_{\ldots}^{(j_{ik} - j_{sa}^{ik} + \ldots)} \sum_{\ldots}^{\boldsymbol{l_s} + \boldsymbol{n} - D)}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + j_{sa}^{ik} \ldots} \sum_{(j^{sa} \ldots + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{\boldsymbol{n} \ldots} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n \ldots + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}}^{(\ )}\sum_{j^{sa}\ldots-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\ldots=\boldsymbol{n}\ldots+1)}^{(n_i-j_s+\ldots}\sum_{n_{ik}\ldots+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-\ldots+1)}^{(\ldots+j_{ik}-j^{sa}-\mathbb{k}_2\ldots}\sum_{n_s=\boldsymbol{n}-j_i+1}^{\ldots j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\ldots)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-\ldots_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(\ldots j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\ -j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{s}\ )}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s+\ -\boldsymbol{n}-j_s)!\cdot(\ -j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\ +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}-1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}-s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_1 : z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik})}$$

GÜLDÜNYA

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)!}{(j_s+\quad-j_{ik}-\boldsymbol{l}\quad)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz\boldsymbol{S}_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ \ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_s}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \le \boldsymbol{l} \le D-\boldsymbol{n}+1 \wedge$

$2 \le j_s \le j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \le j_{ik} \le j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \le j^{sa} \le j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

GÜLDÜNYA

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 2 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\text{[illegible]}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\text{[illegible]}} \sum_{(\text{[illegible]}\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D\text{[illegible]})}^{(\boldsymbol{l_i}+j_{sa}\text{[illegible]}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\text{[illegible]}}^{n} \sum_{n_{is}=\boldsymbol{n}+\Bbbk-\text{[illegible]}1)}^{\text{[illegible]}-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2-j_{ik}+1}^{n_{is}\text{[illegible]}-j_{ik}-\Bbbk_1}$$

$$\sum_{\text{[illegible]}_{sa}=\boldsymbol{n}-j^{sa}+1)}^{\text{[illegible]}+j_{ik}-j^{\text{[illegible]}}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(\text{[illegible]} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-j_i-\boldsymbol{n}-j_s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq \boldsymbol{l_s}-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}+j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge j_{sa}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s},\cdots,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{ik}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{\left(j_s=j_{ik}-j_{sa}^{ik}+1\right)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l}$$

$$(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{$ $\leq j^{sa} + j_{sa}$ $- j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s$ $j^{sa} + s -$ $\leq j_i \leq$ $\wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} =$ $\wedge \boldsymbol{l_i} + j_{sa} -$ $= \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} -$ $\wedge j_{sa}^s < j_{sa}$ $1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa},$ $j_{sa}^i\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s +$ $\wedge$

$\mathbb{k}_z: z = 2 \wedge$ $= \mathbb{k}_1 +$ $\Rightarrow$

$$fz S_{j_s\ , j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GULDUNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l}_s - 1)!}{(n_s + \boldsymbol{l}_s - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l}_s - \boldsymbol{l} - 1)!}{(\boldsymbol{l}_s - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_{sa}} + \boldsymbol{n} + s - D - j_{sa}}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

GÜLDÜNYA

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{2}[\ldots, j_{ik}, j^{sa}, j_{sa}] = \sum_{\boldsymbol{l}=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l}+1)}$$

$$\sum_{j_i=j^{sa}+j_{sa}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{\boldsymbol{l}=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_i}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\sum_{=\boldsymbol{n}+\mathbb{k}-j_s}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}}\sum_{-j^{sa}-\mathbb{k}_2)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < \quad \wedge \boldsymbol{l_s} > D - \quad + 1 \wedge$

$D + \boldsymbol{l} \quad + s - \quad \boldsymbol{l} \quad \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \quad j_s \leq \quad - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad {}_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

GÜLDÜNYA

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=}^{a}{}^{+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-\mathbb{k}_1}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa})\ n_{sa}+j^{sa}-j_i} \sum_{-j_i+1}
$$

$$
\frac{(n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(-j_s-1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s \quad)!}{(n_s+j_i \quad -j_{sa}^{s})!\cdot(\quad -j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s} \quad \boldsymbol{l}-1)!}{\quad -\boldsymbol{l}+\quad)!\cdot(j_s-2)!}$$

$$\frac{(D-\quad}{(D+\quad -\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D \quad +1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j \quad j_{sa}^{ik}-1 \leq j_{ik} \quad j^{sa}+j_{sa} \quad j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa} \quad s \wedge j^{sa}+s \quad j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-\quad +1 > \boldsymbol{l_s} \quad \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \quad \boldsymbol{l_{ik}} \wedge \quad +j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \quad \boldsymbol{n} < n \wedge \quad = \mathbb{k} > 0$

$j_{sa} \quad j_{sa}^{i}-1 \wedge j_{sa}^{ik} \quad j_{sa}-1 \quad < j_{sa}^{ik}-1 \wedge$

$\quad :\{j_{sa}^{s}, \quad \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2 \quad sa, \cdots, j_{sa}^{i}\} \wedge$

$s>5 \wedge \boldsymbol{s}=\quad \mathbb{k} \wedge$

$\mathbb{k}_2 \quad =2 \quad \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{\left(j^{sa}=j_i+j_{sa}-s\right)}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j_i=\boldsymbol{l_{ik}}+\boldsymbol{n}+s-D-j_{sa}^{ik}}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s - \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+s+\boldsymbol{n}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

GÜLDÜNYA

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s -$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!}$$

$$\frac{(\quad \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \quad - \boldsymbol{l} + 1)! \cdot (\quad - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa} + 1)!}{(j_s + \boldsymbol{l_{ik}} - \quad)! \cdot (j_{ik} - \quad - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \quad - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ \ )}$$

$$\sum_{j_{ik} = j^{sa} + j_s^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{ik}} + \boldsymbol{n} + j_{sa} - D - j_{sa}^{ik})}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ \ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

GÜLDÜNYA

$$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s,\ldots,j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\ldots+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{\left(j^{sa}=\ldots+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ldots i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-\boldsymbol{l}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\quad)}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\geq \boldsymbol{n} < \quad \wedge \boldsymbol{l_s} > D - \quad + 1 \wedge$

$2 \leq j_{ik} \leq j_{ik} - \quad \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+\boldsymbol{n}-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{\boldsymbol{n}-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j_{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - j_s)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}-n_{}-\mathbb{k}_2-1)}{(j^{sa}-j_{ik}-1)}$$

$$\frac{n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{ik}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\,(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j}$$

$$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\ \ j_{ik}\leq j^{sa}\ \ j_{sa}^{ik}-j_{sa}$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j_{ik}+s-j_{sa}\leq j_i<\boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\ +j_{sa}-s>\ \wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\ \ j_{sa}^{s}<j_{sa}^{ik}-1$$

$$\boldsymbol{s}\colon\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik}\ \ \mathbb{k}_2,j_{sa},\cdots,j_{sa}^{s}$$

$$s\geq 5\wedge\boldsymbol{s}=\ +\mathbb{k}\wedge$$

$$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\ +\mathbb{k}_2\Rightarrow$$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{sa}^{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \quad)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} \quad n_s - j_i)!} \cdot$$

$$\frac{\quad - 1)!}{(n_s + \quad - \boldsymbol{n} - 1) \quad - j_i)!} \cdot$$

$$\frac{(\quad - \boldsymbol{l} - 1)!}{\quad - j_s - \boldsymbol{l} \quad)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa} \quad \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{\quad} \quad \boldsymbol{l_{ik}})! \cdot (\quad a + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} \quad a - \boldsymbol{l_{sa}} \quad s)!}{(\quad + \boldsymbol{l_i} - j_i - \boldsymbol{l_s} \quad)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\quad)} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j_{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}=j_{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+j_{sa}-D-s-1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right.}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l})!}{(D+j_{\boldsymbol{l}}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\quad-j_i)!}+$$

$$\sum_{\quad}^{(\quad)}\sum_{\quad-j_{sa}^{ik}+1)}$$

$$\sum_{j_{\boldsymbol{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_i}+j_{sa}-D-s)}^{(\boldsymbol{l_{ik}}+j_{sa}-\quad+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}+j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{\boldsymbol{l_{ik}}=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_i}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}}^{(\boldsymbol{l_{sa}}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{=\boldsymbol{n}+\mathbb{k}-}^{} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{+j_{ik}-j^{}-\mathbb{k}_2)}^{} \sum_{n_{sa}+j^{sa}-j_i}^{}$$

$$\sum_{sa}=\boldsymbol{n}-j^{sa}+1) \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

GÜLDÜNYA

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-1}^{\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}-\mathbb{k}_2+1)}^{(\ )}\sum_{j^{sa}=j_i}^{j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s-j_i-\boldsymbol{n}+j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>2-\boldsymbol{n}+1\wedge$

$2<j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_{ik}+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j_i\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge=\mathbb{k}>\wedge$

$j_s<j_{sa}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s>s\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

GÜLDÜNYA

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-} \sum_{=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - 1)}{(j_s - 2)\ (n_i - n_{is}\ + 1)!} \cdot$$

$$\frac{(n_{i} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)\ (n_{i} - n_{is} - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)\ (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)\ (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j_{ik}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-j^{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} j_i=j^{sa}+s-j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{s} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\quad + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s \quad 1)!}{+ j_i \quad - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s \quad \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} \quad \boldsymbol{l_{ik}} - j_{sa}\right)!}{\quad + \boldsymbol{l_{sa}} \quad ^{sa} - \boldsymbol{l_{ik}})! \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} \quad \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

GÜLDÜNYA

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s - 1} \quad \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \quad \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - \text{[illegible]}} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} \text{[illegible]}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (\text{[illegible]}^{sa} + j_{sa}^{ik} - \text{[illegible]} j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} \text{[illegible]} s)!}{(j^{sa} + \boldsymbol{l_i} - \text{[illegible]})! \cdot (j_i + \text{[illegible]} - j^{sa} - s)!}$$

$$\frac{(D - \boldsymbol{l_i} \text{[illegible]}}{(D + j_i \text{[illegible]} \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_i} + \text{[illegible]}^{ik} - D - s}^{\text{[illegible]} - \boldsymbol{l} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right.}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{\boldsymbol{n}+j_{sa}^{ik}-D-s\ (j^{sa}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{(\ -j_{sa}^{ik}+1)}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-\ 1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\boldsymbol{n}>\boldsymbol{n}<\ \wedge\ \boldsymbol{l_s}>D-\boldsymbol{n}+1\ \wedge$

$2\le j_s\le j_{ik}-j_{sa}^{ik}+1\ \wedge\ j_s+j_{sa}^{ik}-1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\ \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le j_i+j_{sa}-s\ \wedge\ j^{sa}+s-j_{sa}\le j_i\le\boldsymbol{n}\ \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\ \wedge$

$D\ge\boldsymbol{n}<n\wedge I=\mathbb{k}>0\ \wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\ldots-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{s}\ldots+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}\ldots+1)} \sum_{j_i=\boldsymbol{l_i}+\ldots D}^{\ldots\boldsymbol{l}+1}
$$

$$
\sum_{n_{\ldots}+\mathbb{k}}^{n} \sum_{(n_{is}=\ldots-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}\ldots+j_{ik}+1}^{\ldots+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{\ldots=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{\ldots}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i}^{\boldsymbol{l_i}-\boldsymbol{l}+1}{}_{sa}+s-j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{n_{is}+j_s}{}_{ik}-\mathbb{k}_1$$

$$\sum_{}^{(n_{ik}+j_{ik}-}{}_{sa}=\boldsymbol{n}-j$$

$$\sum_{}^{}{}_{sa}-j_i+1$$

$$\frac{(\quad-n_{is}-1)!}{(\quad-2)!\cdot(\quad-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_{sa}-1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\ -j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}\ )}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s+\ -\boldsymbol{n}-\ )!\ (\ -j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\ +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}-1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}-s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 = \ \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \ < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_1 : z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)!\,(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_}{(j_{ik}-j_s-1)!\,(}$$

$$\frac{(n_{ik}-n_{}-\mathbb{k}_2-1)}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+j_{}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{{}_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\,(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{{}_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{sa} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l}$$

$$(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+$ $-s>$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_s$ $, j_{sa}^{i}\} \wedge$

$s>5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad \boldsymbol{l}-1)}{(\boldsymbol{l_s}-\quad -\boldsymbol{l}+1)\quad -2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\quad)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}\quad (j^{sa}+j_{s}\quad -j_{ik}-j_{sa})!}$$

$$\frac{(\boldsymbol{l_i}+\quad -\boldsymbol{l_{sa}}-s)}{(j^{sa}+\boldsymbol{l_i}\quad -\boldsymbol{l_{sa}})!\,(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D\quad \boldsymbol{l_i})!}{(D+\quad -\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\text{[illegible]})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\text{[illegible]}-j_{sa}\right)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-\text{[illegible]})!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-\text{[illegible]}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{\text{[illegible]}}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\ \ 1)}$$

$$\sum_{(j_{ik}=j_s+j_{sa}-\text{[illegible]})}\sum_{(\text{[illegible]}+j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{\text{[illegible]}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum$$

$$\boldsymbol{l_{ik}} - \boldsymbol{l} \quad (\quad + 1) \quad \boldsymbol{l_i} - \boldsymbol{l} + 1$$

$$\sum_{j_{ik} \quad + \boldsymbol{n} - D} \sum_{(\quad + \boldsymbol{n} - D)} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}$$

$$\sum_{\quad - j_s + 1)} \sum_{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{\boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \quad - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}$$

$$(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \; n_{sa} + j^{sa} - j_i$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)} \sum_{n_s = \boldsymbol{n} - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}}\sum_{(j_{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s)}^{(\ )}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_{sa}}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{sa}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-n_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(\quad=\boldsymbol{n}-j^{sa}+1)}^{\quad+j_{ik}-j^{sa}+1)} \sum_{\quad-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(-j_s + 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-j_i-\boldsymbol{n}-j_s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq \boldsymbol{l_s}-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}+j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge j_{sa}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s},\cdots,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} \leq s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}-n_{}-\mathbb{k}_2-1)}{(j^{sa}-j_{ik}-1)}$$

$$\frac{a}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa}}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}$ $_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge$ $+s-j_{sa} \leq$ $\boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge$ $+j_{sa}-s >$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1$ $_{sa}^{s} < j_{sa}^{ik}-1$

$\boldsymbol{s}$: $\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}$ $\mathbb{k}_2, j_{sa}, \cdots, j_{sa}$

$s \geq 5 \wedge \boldsymbol{s} =$ $+\mathbb{k} \wedge$

$\mathbb{k}_z$: $z=2 \wedge \mathbb{k} =$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{s} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\quad + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{+ j_i - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \quad - j_{sa}^{ik} + 1)!}{(j_s + \quad - j_{ik} - \boldsymbol{l}) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} -$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{\quad - 1)!}{(n_s + \quad - \boldsymbol{n} - 1)$$

$$\frac{(\quad - \boldsymbol{l} - 1)!}{\quad - j_s - \boldsymbol{l}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(\boldsymbol{l_i}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s \cdots j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}} \sum_{a+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l}+j_{sa}-D-s-1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l}_i)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-j_{sa}}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_s-D)}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{ik}+j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s+\boldsymbol{l}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_s}^{(\boldsymbol{l}-\boldsymbol{l}+1)} \sum_{j_{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+j_s-j_i}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}_1-j_{ik}}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(\quad - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

GÜLDÜNYA

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{sa}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa})}^{(\ )}\sum_{j_i=j^{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}+j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j_{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s>0\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

GÜLDÜNYA

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j^{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-j_i-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_s + \quad - j_{ik} - \boldsymbol{l}\quad)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{\boldsymbol{k}=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

GÜLDÜNYA

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i} + \boldsymbol{n} - D - s)} \sum_{(j_s = \boldsymbol{l_s} + \boldsymbol{n} - D)}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{s} - 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s} - 1)! \cdot (j_{ik} - j_s - \quad + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - \quad)! \cdot (j_i + \quad - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i} \quad}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = \boldsymbol{l_i} + \boldsymbol{n} - D - s + 1)}$$

$$\sum_{j_{ik} \quad s + j_{sa}^{ik} - 1}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\quad)} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{}^{(D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{}\left(j^{s}\sum_{}^{j_{ik}+j_{sa}-j_{sa}^{ik}}\right)\sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$\sum_{}^{(n_i-1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<\ \wedge\ \boldsymbol{l_s}>D-\boldsymbol{n}+1\ \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\ \wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\ \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\ \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\ \wedge$

GÜLDÜNYA

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=}^{+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+} \sum_{(j^{sa}=\boldsymbol{l_{sa}}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{} \sum_{} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(\quad - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )}\sum_{(j^{sa}=j_i+j_{sa}-s}^{\boldsymbol{l_s}+s-}\sum_{=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s}^{}\sum_{-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}}^{(\ )}\sum_{}^{}\sum_{+j^{sa}-j_i}$$

$$\frac{(\boldsymbol{l_s}-j_{sa}^{s})!}{(\boldsymbol{n}-j_i-\boldsymbol{n}+j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\leq j_i+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge\mathbb{k}=\mathbb{k}>\wedge$

$j_{sa}^{s}>j_{sa}^{ik}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s>\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

GÜLDÜNYA

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}-n_{}-\mathbb{k}_2-1)}{(j^{sa}-j_{ik}-1)}$$

$$\frac{a}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j^{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-n_s-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l}$$

$$(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} +$ $- s =$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik}$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_s$ $, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ , j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l}-1)}{(\boldsymbol{l_s}-\boldsymbol{l}+1)(-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}+1)!}{(j_s+\boldsymbol{l_{ik}}-)!\cdot(j_{ik}-j_{sa}^{ik}+1)!}$$

$$\frac{+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{ik-\boldsymbol{l}+1}\sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{}\sum_{}^{}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}-j_{sa}-\boldsymbol{l})}\sum_{(j_i+\boldsymbol{n}+j_{sa}-D-s)}^{}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{(j_i=\boldsymbol{n}+\mathbb{k}}^{m}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j_{sa}^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}-\boldsymbol{l}-D)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{\boldsymbol{n}=\boldsymbol{n}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik}+1)} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}-D}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{sa}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{} - j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_i-j_s+1}^{(n_i-j_s+1} \sum_{n_{ik}-\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_i+1)}^{(n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s -)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - _s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

GÜLDÜNYA

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)}\ \sum_{j_{sa}}^{j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+}^{(n_{ik}+j_{ik}-}\ \sum_{}^{n_{sa}+j^{sa}-}$$

$$\sum_{}^{\boldsymbol{n}-j_i+1}$$

$$\frac{-n_{is}-1)!}{-2)!\cdot(-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa})}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}$ $\wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq$ $a}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+$ $-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge$ $_{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 >$ $\wedge \boldsymbol{l_{sa}}+$ $^{ik}-j_{sa} >$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq$ $< n \wedge I = \mathbb{k}$ $0 \wedge$

$j_{sa} \leq j_{sa}^{i}$ $1 \wedge j_{sa}^{ik} < j_s$ $-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_s^s, \cdots, \mathbb{k}_1, j_{sa}$ $_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s}$ $s+\mathbb{k} \wedge$

$\cdot z = 2$ $\mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

GULDUNYA

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i}{(j_s-2)!\cdot(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}}{(j_{ik}-j_s-1}$$

$$\frac{(n_{ik}-n_{}-\mathbb{k}_2-}{(}$$

$$\frac{}{(j_i-j^{sa}-1}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\boldsymbol{l})!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \wedge \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^s < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad \boldsymbol{l}-1)}{(\boldsymbol{l_s}-\quad -\boldsymbol{l}+1)\quad -2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}+1)!}{(j_s+\boldsymbol{l_{ik}}-\quad)!\cdot(j_{ik}-\quad -j_{sa}^{ik}+1)!}$$

$$\frac{+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{s}-\boldsymbol{l_{ik}})!\cdot(\quad +j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad -\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)}\sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(\quad+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=}\ \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{m}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j_{sa}^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)} $$

$$ \sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{n})} \sum_{j_{sa}=s-j_{sa}} $$

$$ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot $$

$$ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot $$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{}^{}\ -j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{}^{(n_i-j_s}\ \sum_{}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\quad)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-\quad s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(\quad ik-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}+0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}+n}-D}^{\boldsymbol{l_{sa}+n}+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}+n}-D)}^{(\boldsymbol{l_{sa}-l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)!\,(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_}{(j_{ik}-j_s-1)!\,(}$$

$$\frac{(n_{ik}-n_{}-\mathbb{k}_2-1)}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+}$$

$$\frac{}{(j_i-j^{sa}-1)!\,(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}-l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s\quad)!}\cdot$$

$$\frac{(n_s\quad-1)!}{+j_i\quad-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\quad-j_{sa}^{ik}+1)!}{(j_s+\quad-j_{ik}-\boldsymbol{l}\quad)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\quad(j_s-2)!}$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}-1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}-\quad)!\quad(j_{ik}-j_s-\quad+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\quad)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\quad)!\quad(j^{sa}+j_{sa}-\quad-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}\ \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right.}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\right.-j_{sa})!}$$

$$\frac{(D$$

$$(D+j_i$$

$$-\frac{}{\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}\sum_{(j_s}$$

$$\sum_{=j_s+j_{sa}^{ik}-1}^{(}\sum_{(j^{sa}$$

$$\sum_{k}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\boldsymbol{>n}\ldots\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$$

$$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}-D)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}-s)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n_{is}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l} \cdots \boldsymbol{n} - D}^{j_s + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_i = \boldsymbol{n} + \mathbb{k} \cdots)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} \cdots j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} \cdots j_{ik} - j^{sa} \cdots)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + \boldsymbol{l_s} - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{n} = \boldsymbol{n} + \mathbb{k} \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} j_{ik}+1
$$

$$
(n_{ik} - j^{sa}-\mathbb{k}_2)\ n_{sa} - j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - }{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_i - j_s - 1)! \cdot (n + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s+j_i-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{n})!}{(D+j_s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{sa}-j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s}+\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \leq \boldsymbol{l_{ik}} \wedge j_i+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D > \boldsymbol{n} < n \wedge \boldsymbol{n}=\mathbb{k} > 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s}=\boldsymbol{s}+\mathbb{k} \wedge$

$\mathbb{k}_2 \leq \boldsymbol{s} \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l}$$

$$(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{$ $\leq j^{sa} + j_{sa}$ $- j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s$ $^{sa} + s -$ $\leq j_i \leq$ $\wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} >$ $\wedge \boldsymbol{l_i} + j_{sa} -$ $= \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} -$ $\wedge j_{sa}^s < j_{sa}$ $+ 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa},$ $j_{sa}^i\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s +$ $\wedge$

$\mathbb{k}_z: z = 2 \wedge$ $= \mathbb{k}_1 +$ $\Rightarrow$

$$fz S_{j_s\ , j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GULDUNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

GÜLDÜNYA

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s \cdots j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{a+j_{sa}^{ik}-j} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right)}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\quad-j_{sa}\right)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}\quad)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j\quad s)!}\cdot$$

$$\frac{(D\quad\boldsymbol{l_i})!}{+j\quad\boldsymbol{n}-\boldsymbol{l_i}\quad(\boldsymbol{n}-j_i)!}+$$

$$\sum_{\boldsymbol{l_{ik}}=\boldsymbol{l}}^{\quad+1)}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{\mathbb{k}=} \sum_{j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\boldsymbol{n} \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{\boldsymbol{k}=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l}_{\boldsymbol{s}}+\boldsymbol{n}-D)}^{(\boldsymbol{l}_{\boldsymbol{ik}}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l}_{\boldsymbol{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l}_{\boldsymbol{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l}_{\boldsymbol{i}}+\boldsymbol{n}-D-s-1)} \sum_{j_i=\boldsymbol{l}_{\boldsymbol{i}}+\boldsymbol{n}-D}^{\boldsymbol{l}_{\boldsymbol{i}}+\boldsymbol{n}-1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}_1}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{k=\boldsymbol{l}}^{j_{ik}-j_{sa}^{ik}+1} \sum_{(j_s=\boldsymbol{l}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\boldsymbol{l}+\boldsymbol{n}+j_{sa}-D}^{(\boldsymbol{l_s}+} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-}^{-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1}$$

$$\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{+j_{ik}-j^{}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(\quad - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l_{ik}})}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}-j_i}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}_1-j_i+1)}^{n_i-j_s}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D \ldots - j^{sa} \ldots - j_{sa}}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_i = \boldsymbol{n} + \ldots + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \ldots + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \ldots + j_{ik} - j^{sa} \ldots)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_{sa} - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \ldots D - \boldsymbol{n} \ldots 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} - j_{sa} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j^i \ldots 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l}_i+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l}_{sa}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}}^{\boldsymbol{l}_i-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} + j_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}-j} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}-j_i}$$

$$\frac{(n_{is}-n_{is}-1)!}{(j_s-2)!\cdot(n_i \quad j_s+1)!}\cdot$$

$$\frac{(n_{ik}-n_{ik} \quad \mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s \quad n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa} \quad \mathbb{k}_2-1)!}{(j_{ik}-1)!\cdot(n_{ik} \quad j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}} {}_2-j_{ik}+1$$

$$(n_{ik}+j_{ik} \quad \mathbb{k}_2)\ n_{s} \quad {}^{sa}-j_i$$

$$\sum \sum$$

$$(n_{sa}= \quad {}^{sa}+1) \quad n_s=\boldsymbol{n}-j$$

$$\frac{(n_i - n \quad -1)!}{(j_s \quad 2)! \cdot (\quad n \quad j_s+1)!} \cdot$$

$$\frac{{}_s - n_{ik} \quad \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1) \quad (n_{is} + j_s \quad n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s \quad - \mathbb{k}_2 - 1)!}{{}^{sa} - j_{ik} \quad 1)! \cdot (n_{ik} \quad j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{ - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa})}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n}$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 >$ $\wedge \boldsymbol{l_{sa}} +$ $- j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq$ $< n \wedge I = \mathbb{k}$ $0 \wedge$

$j_{sa} \leq j_{sa}^{i}$ $1 \wedge j_{sa}^{ik} < j_s$ $- 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_s^s, \cdots, \mathbb{k}_1, j_{sa}$ $_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s}$ $s + \mathbb{k} \wedge$

$\cdot z = 2$ $\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}+n-D}}^{\boldsymbol{l_{ik}-l+1}} \sum_{(j^{sa}=\boldsymbol{l_{sa}+n-D})}^{(\boldsymbol{l_{sa}-l+1})} \sum_{j_i=\boldsymbol{l_i+n-D}}^{\boldsymbol{l_i-l+1}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i}{(j_s-2)!\cdot(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}}{(j_{ik}-j_s-1}$$

$$\frac{(n_{ik}-n_{}-\mathbb{k}_2-}{(j^{sa}-j_{ik}-1}$$

$$\frac{}{(j_i-j^{sa}-1}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_s-l+1}} \sum_{(j_s=\boldsymbol{l_i+n-D}-s+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{i}-n_{ik}-\mathbb{k}_{}+1)!}{(j_{ik}-j_s-1)!\,(}$$

$$\frac{(n_{ik}-n_{s}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+}$$

$$\frac{}{(j_i-j^{sa}-1)!\,(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s+j_i-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{n})!}{(D+j_s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{ik}-j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s}+\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge j_i+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{n} = \mathbb{k} > 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = \boldsymbol{s}+\mathbb{k} \wedge$

$\mathbb{k}_2 \wedge \boldsymbol{n} = \boldsymbol{n}+\mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\,(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} + j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_{sa}} + j_{sa} - s > 0 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{s}\}$

$s \geq 5 \wedge \boldsymbol{s} = \quad + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \quad + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(j_i+j_{sa}-s)}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s + \mathbb{k} - \boldsymbol{n} - 1)!}{(n_s + \mathbb{k} - \boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l} - \boldsymbol{l} - 1)!}{(j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + \boldsymbol{l} - \boldsymbol{l_{sa}})!}{(j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D + \boldsymbol{l_i})!}{(D + \mathbb{k} - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{sa} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{j_i = \boldsymbol{l_{sa}} + s - \boldsymbol{l} - j_{sa} + 2}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{\boldsymbol{l}}^{(\ )}\sum_{(j_s+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{\boldsymbol{l_{sa}}+s-j_{sa}+1}\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )}\sum_{j_i=j_i+j_{sa}-}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}-\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_{ik}+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<1\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s \cdots +\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(j_i+j_{sa}-s)} \sum_{\left(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa} \cdots j_{sa}^{ik}\right)}^{\boldsymbol{l_{ik}}+s \cdots j_{sa}^{ik}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}}^{}
$$

$$
\sum_{}^{n} \sum_{(n_i-j_s+1)}^{} \sum_{\cdots+j_s-j_{ik}-\mathbb{k}_1}^{}
$$

$$
\sum_{\cdots+\mathbb{k}\ (n_{is}-\cdots-\mathbb{k}-j_s+1)\ n_{ik}\cdots}^{} \sum_{\cdots+j_{ik}+1}^{}
$$

$$
\sum_{(n_{ik}+\cdots-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i}^{}
$$

$$
\sum_{\cdots_{sa}=\boldsymbol{n}-j^{sa}+1)}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is} - 1)!}{\cdots - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - \cdots_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\cdots^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}-} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{is} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa}}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-}{(\boldsymbol{l_s}-j_s}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} + j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_{ik} + s - j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \quad + j_{sa} - s > 0 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \quad j_{sa}^{s} < j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik} \quad \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{s}$

$s \geq 5 \wedge \boldsymbol{s} = \quad + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \quad + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}-D-1)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GULDUNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s + \mathbb{k} - \boldsymbol{n} - 1)!}{(n_s + \mathbb{k} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l} - \boldsymbol{l} - 1)!}{(j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + \boldsymbol{l_s} - \boldsymbol{l_{sa}})!}{(j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D + \boldsymbol{l_i})!}{(D + \mathbb{k} - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} - j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa} - D - 1)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{j_i = \boldsymbol{l_s} + s - \boldsymbol{l} + 1}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{\boldsymbol{l}=\boldsymbol{l}_i}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-s}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\boldsymbol{n}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s \quad +\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{} \sum_{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)}^{} \sum_{\quad -\boldsymbol{l}+1}^{}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{} \sum_{(j^{sa} \quad +\boldsymbol{n}-D)}^{} \sum_{j_i=\boldsymbol{l_i} \quad -D}^{}
$$

$$
\sum_{}^{n} \sum_{(n_i-j_s+1)}^{} \sum_{n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{}
$$

$$
\sum_{\boldsymbol{n}+\mathbb{k}\ (n_{is} \quad +\mathbb{k}-j_s+1)}^{} \sum_{\quad -j_{ik}+1}^{}
$$

$$
(n_{ik} \quad -j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is} - 1)!}{2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - \quad s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}} \sum_{-j_{ik}+1}$$

$$(n_{ik}+j_{ik}$$

$$\sum_{(n_{sa}=$$

$$\frac{(n_i - n$$

$$\frac{n_{is} - n_{ik}$$

$$\frac{(n_{ik} - n_s$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-1)!\cdot(\boldsymbol{l}-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \wedge j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j_i+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge j_i+j_{sa}-s>0 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^i-1 \wedge j_{sa}^{ik}<j_{sa}-1 \wedge j_{sa}^s<j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{ik}\}$

$s>5 \wedge \boldsymbol{s}=\boldsymbol{n}+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{s} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\quad + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s \quad 1)!}{+ j_i \quad - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s \quad \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + \quad - \boldsymbol{l_{sa}} - s)!}{(j^{sa} \quad \boldsymbol{l_i} - j_i - \boldsymbol{l_s} \quad \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l}-1)}{(\boldsymbol{l_s}-\boldsymbol{l}+1)\,(-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_s}-s)!}{(j^{sa}+\boldsymbol{l_i}-)!\cdot(j_i+-j^{sa}-s)!}$$

$$\frac{(D-}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}-\boldsymbol{l_{sa}}}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})} \sum_{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}}} \sum_{(j^{sa} = \boldsymbol{l_s} + j_{sa} - D - 1)} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}$$

$$\sum_{\boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)} \sum_{n_s = \boldsymbol{n} - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-\boldsymbol{l_{ik}})}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-j_{sa}}^{\boldsymbol{l_s}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\boldsymbol{l_i}}^{n}\sum_{(j_s=\boldsymbol{l_s}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+j_{sa}+1)}^{n_{sa}+j_{ik}-j_{sa}}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_s+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-1)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=\boldsymbol{n}+j^{sa}-j_i}$$

$$\frac{(n_s+j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(j_{sa}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{n})!}{(D+j_s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j_{sa}^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_{ik}+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_s}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \boldsymbol{n} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}^{s}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{ik}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\quad-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-\quad-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-\quad-1)!}{(\quad-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-\quad-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\quad+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\quad)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\quad)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + \boldsymbol{l_{sa}} - \boldsymbol{l_{sa}})!}{(j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} + 1} \sum_{(j^{sa} = j_{ik} + \boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

GÜLDÜNYA

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{\mathbb{k}_z}S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_s})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s} \sum_{(j_{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_s})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - \quad +$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=\quad + \boldsymbol{l_s} - \boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\quad)}^{(\ \ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\quad -1}$$

$$\sum_{n_i=\boldsymbol{n}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}_1+1)}^{(\ \ )} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(\quad a=\boldsymbol{n}-j^{sa}+1)}^{n_{ik}+j_{ik}-j_{ik}+\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-j_i-\boldsymbol{n}-j^{sa})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}-1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j_i \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \leq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{ik}-1 \wedge j_{sa}^{ik} < j_{sa}^{s}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge s > s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)\,(n_i - n_{is} \quad + 1)!} \cdot$$

$$\frac{(n_{i} - n_{ik} - \mathbb{k}_1 \quad 1)!}{(j_{ik} - j_s - 1)\,(n_i - n_{is} - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)\,(n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{{}_{a} - n_s \quad 1)!}{{}_{i} - j^{sa} - 1)\,(n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+\quad-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_s}\quad)!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{\boldsymbol{k}=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\quad)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-S}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\quad)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S}{}_{j_s \ldots j^{sa} \ldots} \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-[illegible]}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{([illegible]\boldsymbol{l_i})!}{(D+j[illegible]-\boldsymbol{n}-\boldsymbol{l_i})![illegible]j_i)!}+$$

$$\sum_{[illegible]}\sum_{(j_i=\boldsymbol{l_i}[illegible]-D-s+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2[illegible]}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}\sum_{([illegible]=j_{ik}+\boldsymbol{l_{sa}}-[illegible]k)}^{[illegible])}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i[illegible]+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} - j_{sa} + 2)} \sum_{(j_s = \boldsymbol{l_i} + \boldsymbol{n} - D - s +}$$

$$\sum_{j_{ik} = j_s + \boldsymbol{l_{ik}} - \boldsymbol{l_s}} \sum^{(\ )} \sum_{(j^{sa} = j_{ik} + \boldsymbol{l_{sa}}} \sum_{j_i = j^{s} - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(} \sum_{+1)\, n_{ik}} \sum_{+ j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} + j_{ik} - j} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \quad > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \quad \leq j_{ik} - j_{sa}^{ik} + \quad \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$+ j_{sa} \quad {}_{sa}^{ik} \leq j^{sa} \leq \quad + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - \quad + 1 \quad + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < \quad \wedge I = \mathbb{k} > 0 \wedge$

$\quad \leq j_{sa}^{i} \quad \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}} \sum_{\mathbb{k}_2-j_{ik}+1}
$$

$$
(n_{ik}+j_{ik} \quad \mathbb{k}_2)\ n_{sa} \quad {}^{sa}-j_i
$$

$$
\sum_{(n_{sa}= \quad {}^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j}
$$

$$
\frac{(n_i - n \quad -1)!}{(j_s \quad 2)! \cdot (\quad n_{\quad} j_s+1)!} \cdot
$$

$$
\frac{{}_s - n_{ik} \quad \mathbb{k}_1 - 1)!}{(j_{ik}-j_s-1) \quad (n_{is}+j_s \quad n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik}-n_s \quad -\mathbb{k}_2-1)!}{{}^{sa}-j_{ik} \quad 1)! \cdot (n_{ik} \quad j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{ \quad -j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)! \cdot (j_s-2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ \ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - \text{[illegible]}} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \text{[illegible]} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}}) \cdot (j_i + j_{sa} \text{[illegible]} - s)!} \cdot$$

$$\frac{(\text{[illegible]} - \boldsymbol{l_i})!}{\text{[illegible]} - \boldsymbol{n} - \text{[illegible]}! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{\text{[illegible]}} \sum_{(j_s = \boldsymbol{l_i} + \boldsymbol{n} - D - s + 1)}^{(\text{[illegible]} + 1)}$$

$$\sum_{j_{ik} = j_s \text{[illegible]} - \boldsymbol{l_s}} \sum_{(j_{ik} + \boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l}}^{(}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}$$

$$\sum_{(n_{sa}=n_{ik}+}^{(}$$

$$\frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n}$ $n \wedge \boldsymbol{l_s} > D -$ $+ 1 \wedge$

$D + \boldsymbol{l_s} + s$ $\boldsymbol{n} - \boldsymbol{l_i} +$ $\leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq$ $_s -$ $_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} -$ $_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}$ $_{sa} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

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$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{\boldsymbol{l_i}=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}_1+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{\boldsymbol{n}=j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}
$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=\boldsymbol{n}+j^{sa}-j_i}$$

$$\frac{(n_s+j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(j_{sa}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\boldsymbol{l_i}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{sa}-j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}-\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}-\boldsymbol{l_{ik}} \wedge D+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = \boldsymbol{n}+\mathbb{k} \wedge$

$\mathbb{k}_1 = 0 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$fz S_{j_s\ , j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{(j^{sa} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa} - D - 1)}^{\boldsymbol{l_i} - \boldsymbol{l} + 1} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}}) \cdot (j_i + j_{sa} - \boldsymbol{} - s)!} \cdot$$

$$\frac{(\boldsymbol{} - \boldsymbol{l_i})!}{\boldsymbol{} - \boldsymbol{n} - \boldsymbol{} \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{\boldsymbol{} = \boldsymbol{l}} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}} \sum_{\boldsymbol{} + \boldsymbol{l_{ik}} - \boldsymbol{}} \sum_{(j^{sa} = j_i + j_{sa} - s)} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{\boldsymbol{} = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} \sum \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$+ j_{sa}^{ik} - \boldsymbol{l} - j_{sa} + 1 \qquad \boldsymbol{l_i} - \boldsymbol{l} + 1$$

$$\sum \sum_{j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - j_{sa}} \sum \sum_{(j^{sa} + \boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})\ j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}$$

$$- j_s + 1) \qquad n_{is} + j_s - j_{ik} - \mathbb{k}_1$$

$$\sum_{n_{sa} + \mathbb{k}\ (n_{is} = \quad \mathbb{k} - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}$$

$$(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)\ n_{sa} + j^{sa} - j_i$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)} \sum_{n_s = \boldsymbol{n} - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_i}}$$

$$\sum_{j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l} - j_{sa} + 1} \quad \sum^{(\ )} \quad \sum \quad (j^{sa} = j_{ik} + \boldsymbol{l_{sa}} \quad = j^{sa} \quad - j_{sa}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \quad \sum^{(n_i - j_s + 1)} \quad \sum \quad n_{ik} = \quad + j_s - j_{ik} - \mathbb{k}_1$$

$$\sum^{(\ )} \quad \sum \quad (n_{sa} = \quad + j_{ik} - j^{sa} \quad) \; n_s = n_{sa} + j^{sa} - j_i$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j \quad - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \quad D - \boldsymbol{n} \quad 1 \wedge$

$D + \quad + s - \boldsymbol{n} - \boldsymbol{l_i} \quad 1 \leq \boldsymbol{l} \leq \quad - \boldsymbol{n} + 1 \wedge$

$\leq j_s \leq \quad - j_{sa}^{ik} + 1 \wedge \quad + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \quad - j_{sa}^{ik} \quad \quad \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\quad > \boldsymbol{n} < \quad \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2-j_{ik}+1}
$$

$$
(n_{ik}+j_{ik}\ \ -\mathbb{k}_2)\ n_{sa}^{\ \ j^{sa}-j_i}
$$

$$
\sum_{(n_{sa}=\ \ _{j^{sa}+1})}^{\ } \sum_{n_s=\boldsymbol{n}-j_i+1}^{\ }
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{ik}-j_s+1)!}\cdot
$$

$$
\frac{n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa}}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-}{(\boldsymbol{l_s}-j_s}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D -$ $+ 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq$ $\leq j^{sa} + j_{sa}^{i}$ $j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} +$ $- j_{sa} \leq j_i \leq$ $\wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} +$ $- j_{sa} = \boldsymbol{l_{ik}}$ $\boldsymbol{l_i} + j_{sa}$ $\boldsymbol{sa} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{s}$ $\leq j_{sa} - 1 \wedge j_{sa}^{s}$ $j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}$ $_{sa}^{ik}, \cdots, \mathbb{k}$ $_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s +$

$\mathbb{k}_z : z$ $2 \wedge \mathbb{k} = \mathbb{k}_1 +$ $\Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+\quad-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l}_i-j_i-\boldsymbol{l_s}\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ \ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\quad \boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot\quad j_i)!}-$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{(\quad -D-s+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(\quad)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-\quad 1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<\quad\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}+1}
$$

$$
\sum_{\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}}^{(n_i-j_s+1)} \sum_{}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1}^{(n_{ik}+} \sum_{n_s=\boldsymbol{n}-j_i+1}^{-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} + s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$(n_{ik}+j_{ik}$$

$$(n_{sa}=$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-1)!\cdot(\quad-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} + j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \quad + j_{sa} - s = \quad \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \quad j_{sa}^{s} < j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik} \quad \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{s}$

$s \geq 5 \wedge \boldsymbol{s} = \quad + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \quad + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GULDUNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!} \frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!} \frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(\boldsymbol{l_{sa}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s -$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!}$$

$$\frac{(\quad \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \quad \boldsymbol{l} + 1)! \cdot (\quad - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} \quad)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} \quad (j^{sa} + j_{s} - j_{ik} - j_{sa})!}$$

$$\frac{(D - \boldsymbol{l_i}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{= j^{sa} + j_{sa}^{ik} - j_{sa}}^{(\quad)} \sum_{(j^{sa} = j_i + \boldsymbol{l_i} - \boldsymbol{l_{sa}})}^{\boldsymbol{l_s} + s - \boldsymbol{l}} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

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$2 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\left(\quad\right)}_{j\left(\quad\right)} = \sum_{1\ (j_s \quad +\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\quad)}$$

$$\sum_{j^{sa}+j_{sa}^{ik}-j_{\quad}}^{\left(\boldsymbol{l_{ik}}+j_{sa}\quad -j_{sa}^{ik}+1\right)}$$

$$\sum_{=\boldsymbol{l_{ik}}+\boldsymbol{n}-D\ (j^{sa}=\quad +j_{sa}-D-s)}^{} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i \quad +1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}}}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j^{sa}} -\boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{=\boldsymbol{n}}^{(n_i-j_s+} \sum_{+1)\ n_{ik}}^{n_{is}+j_s-j_{ik}} \sum_{+\mathbb{k}_2-j_{ik}+1}$$

$$(+j_{ik}-j^{sa}-\mathbb{k}_2 \qquad j^{sa}-j_i$$

$$\sum_{(n_{sa}=\boldsymbol{n}-} \sum_{+1)\ \ n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s -)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - _s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\quad j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-j_s-\boldsymbol{n}-\boldsymbol{l_s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}-1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+j_{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 = \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1+1)!}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+j_{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{a}{(j_i-j^{sa}-1)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{ik}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s\quad)!}\cdot$$

$$\frac{(n_s\quad 1)!}{+j_i\quad-1)!\,(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s\quad\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}\quad\boldsymbol{l_{ik}}-j_{sa})!}{+\boldsymbol{l_{sa}}\quad^{sa}-\boldsymbol{l_{ik}})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_s \cdots j_{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_s})}$$

$$\sum^{\boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - s - 1} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}^{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l} - s + 1)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\boldsymbol{l}+1)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}\cdot$$

$$\frac{(D+\boldsymbol{l_i}-\boldsymbol{l}_i)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{l_i}-j_i)!}+$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{\boldsymbol{n}+j_{sa}^{ik}-D-s}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)}\sum_{(j^{sa}-j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}+j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}}}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum^{(\ )} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}\right.} \sum_{j^{sa}} -\boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum^{(n_i - j_s + 1)} \sum_{n_{ik}=} \sum_{j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa}=} \sum_{j_{ik} - j^{sa}} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s}$ $D - \boldsymbol{n}$ $1 \wedge$

$2 \leq$ $\leq j_{ik} - j_{sa}^{ik} +$ $j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}$ $^{ik} \leq j^{sa} \leq$ $+ j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}$ $^{ik} + 1 = \boldsymbol{l_s}$ $\boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n$ $= \mathbb{k} > 0 \wedge$

^{i} $1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+j_{sa}+1)}^{(n_{ik}+j_{ik}-\boldsymbol{n}-j_{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_s-2)!\cdot(\quad j_s+1)!}\cdot
$$

$$
\frac{(n_{is}+j_s-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(n_{sa}-j_{ik}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(\quad -j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_{sa}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f(j_s, j_{ik}, j^{sa}, j_i) = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}}$$

$$(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot$$

$$\frac{(D$$

$$\boldsymbol{n} - \boldsymbol{l}$$

$$\sum_{k$$

$$\sum_{j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_i}+$$

$$\sum_{=j_s+\boldsymbol{l_{ik}}}^{(}$$

$$\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{l_{ik}}=\boldsymbol{l_i}}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-s+1)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\sum_{j_{sa}=j_{ik}+j_{sa}-j_s}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\sum_{(n_s=\boldsymbol{n}+\mathbb{k}-j_s)}^{(n_s=j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} j_{ik}+1
$$

$$
(n_{ik} - j^{sa}-\mathbb{k}_2)\ n_{sa} - j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i -}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_i - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}
$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l}$$

$$(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} +$ $- s = \boldsymbol{l}$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik}$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_s$ $, j_{sa}^i\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_i-\boldsymbol{l}+1)!\cdot(\boldsymbol{l}-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-j_{sa}-\boldsymbol{l_i})!\cdot(j^{sa}+j_s-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l}+\boldsymbol{n}-D}^{j_{ik}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\ \sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot -j_i)!}$$

$$\sum_{=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-}$$

$$\boldsymbol{l_{i}}-\boldsymbol{l}-j_{sa}^{ik}+1$$

$$\sum_{k=j^{sa}+j_{sa}^{ik}-} \sum_{(j^{sa}=j_i+-\boldsymbol{l_i})\ j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}}$$

$$-j_s+1)$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+j_s+1)\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \le j_s \le j_{i} - j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \le j_{ik} \le j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik} - j_{sa}^{ik} \le j^{sa} \le j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \ge \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l}}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l}}^{(\ )} \sum_{+\boldsymbol{n}+s}^{\boldsymbol{l}-\boldsymbol{l}} D-j_{sa}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{\mathbb{k}-j_s+1)}^{(n_i-j_s} \sum_{\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-} {}_1
$$

$$
\sum_{(n_{sa}=}^{+j_{ik}-} \sum_{sa}+1) \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \quad)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(\quad n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \quad j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\quad k - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_2+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{ik}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_{sa}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\,(\boldsymbol{n}-j^{sa}}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-$$

$$\frac{(\boldsymbol{l_s}-j_s$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-$$

$$D\geq \boldsymbol{n}<n\wedge \boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$$

$$D\geq \boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1$$

$$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik}$$

$$s\geq 5\wedge \boldsymbol{s}=$$

$$\mathbb{k}_z:z=2\wedge\mathbb{k}=$$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s\quad)!}\cdot$$

$$\frac{(n_s\quad-1)!}{+j_i\quad-1)!\,(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s\quad\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}\quad\boldsymbol{l_{ik}}-j_{sa}\right)!}{+\boldsymbol{l_{sa}}\quad^{j^{sa}}-\boldsymbol{l_{ik}})!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad \boldsymbol{l}-1)}{(\boldsymbol{l_s}-\quad -\boldsymbol{l}+1)\quad -2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\quad)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}\quad (j^{sa}+j_{s}\quad -j_{ik}-j_{sa})!}$$

$$\frac{(D-\boldsymbol{l_i}\quad}{(D+j_i\quad \boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{\quad}\quad j_{sa}^{ik}-j_{sa}}\quad\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}\quad\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

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$2 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{[illegible]} = \sum_{[illegible]} \sum_{[illegible]}^{(\ )}$$

$$\sum_{j_{[illegible]}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{i[illegible]}} \sum_{[illegible]=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l}[illegible]_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{i[illegible]}+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}}}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}_1+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\mathbb{k}_1+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-1)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-j_i-\boldsymbol{n}-j^{sa})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} - 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \leq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} - j_{sa}^{ik} - j_{sa} \geq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge s > s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)!\,(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_}{(j_{ik}-j_s-1)!\,(}$$

$$\frac{(n_{ik}-n_{}-\mathbb{k}_2-1)}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+}$$

$$\frac{{}_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\,(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{{}_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!} \frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!} \frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(\boldsymbol{l_{sa}}+\boldsymbol{l_{sa}}^{j^{sa}}-\boldsymbol{l_{ik}})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{j_s,j_{ik},j_{sa},j_i}=\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+\mathbb{k}-D-j_{sa}-1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\boldsymbol{l}+1)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}$$

$$\frac{(D+\boldsymbol{l_i})!}{(D+j_i+\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\sum_{j_{ik}+j_{sa}^{ik}-D-j_{sa}}^{(\boldsymbol{l_{sa}}+1)}\sum_{(j^{sa}+j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}+j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}}}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum\ -\boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_i-j_s+1)}\ \sum_{n_{ik}=}\ \sum_{j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=}^{(\ )}\ \sum_{j_{ik}-j^{sa}}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+\ -\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\ D-\boldsymbol{n}\ \wedge$

$2\leq j\ <j_{ik}-j_{sa}^{ik}+\ j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-\ ^{ik}\leq j^{sa}\leq\ +j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}\ +1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\ \boldsymbol{l}=\mathbb{k}>0\wedge$

$\ \ <j_{sa}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}
$$

$$
\sum_{(n_{ik}+j_{ik}-\mathbb{k}_2)} n_{sa}^{j^{sa}-j_i}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i}
$$

$$
\frac{(n_i - n_{i\mathbb{k}} - 1)!}{(j_s - 2)! \cdot (n_{i\mathbb{k}} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_{sa}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_{sa}}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - \quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-$$

$$\frac{(\boldsymbol{D}-\boldsymbol{l_i})!}{\boldsymbol{n}-\boldsymbol{l_i}\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l}}^{(} \sum_{-\boldsymbol{l}+1)}^{} \sum_{j_{ik}+j_{sa}-j_{sa}^{ik})\ j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)} \sum_{(j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}-j_{sa}+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\boldsymbol{n}} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(\boldsymbol{n}+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\boldsymbol{n}+\mathbb{k}-j_s+1)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{l_i} \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\right\} \wedge$

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$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{\boldsymbol{l_i}=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-n_{ik}-\mathbb{k}_1}
$$

$$
\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{(n_s}{(n_s+j_i}$$

$$\frac{(\boldsymbol{l_s}}{}$$

$$\frac{(D}{(D+}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s}$

D

j_{sa}

s

$s > 5 \wedge \boldsymbol{s} =$

$\mathbb{k}_2$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_{sa}+j_i-n_s-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_i}-\boldsymbol{l_{sa}})}^{(\ )}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\text{[illegible]}}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)\text{[illegible]}(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\text{[illegible]}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\text{[illegible]}^{sa}+j_{sa}^{ik}-\text{[illegible]}j_{sa})!}\cdot$$

$$\frac{(D\text{[illegible]}\boldsymbol{l_i})!}{\text{[illegible]}\boldsymbol{n}-\boldsymbol{l_i}\text{[illegible]}(\boldsymbol{n}-j_i)!}$$

$$\sum_{\text{[illegible]}=\boldsymbol{l}}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\text{[illegible]}+j_{sa}^{ik}-j_{sa}}\sum_{\text{[illegible]}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{ik}}+j\text{[illegible]}\boldsymbol{l}-j_{sa}^{ik}+1)}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{\text{[illegible]}i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})} \sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-\boldsymbol{l}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{j_{sa}=\boldsymbol{l_i}+\boldsymbol{n}+} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}\ (n_{is}=} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}}}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}\right.}^{(\ )}\sum_{j^{sa}}-\boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_i}^{(n_i-j_s+1)}\sum_{n_{ik}=}j_s-j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=}\sum_{j_{ik}-j^{sa}}n_s=n_{sa}+j^{sa}-j_i$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}$ $D-\boldsymbol{n}$ $1\wedge$

$D+$ $+s-\boldsymbol{n}-\boldsymbol{l_i}$ $1\leq\boldsymbol{l}\leq$ $-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_{ik}+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+$ $-j_{sa}^{ik}\leq$ $\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+$ $=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$>\boldsymbol{n}$ $\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{\boldsymbol{n}+\mathbb{k}}^{n_{is}+\boldsymbol{n}+\mathbb{k}-j_{ik}-\mathbb{k}_1} \sum_{j_{ik}+1}
$$

$$
\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{} \sum_{n_{sa}+j_{sa}-j_i}
$$

$$
\sum_{\boldsymbol{n}-j^{sa}+1}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - j_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{(n_s}{(n_s+j_i}$$

$$\frac{(\boldsymbol{l_s}}{}$$

$$\frac{(D}{(D+}$$

$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

$$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}$$

$$\boldsymbol{l_{ik}} -$$

$$D$$

$$j_{sa}$$

$$s$$

$$s > 5 \wedge \boldsymbol{s} =$$

$$\mathbb{k}_2$$

$$f_z S_{j_s,\, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{\left(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s\right)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{sa} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (n_{sa} + j_{sa}^{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{k} \sum_{(j_s = \boldsymbol{l_i} + \boldsymbol{n} - D - s + 1)}$$

$$\sum_{j_{ik} = j_s + \boldsymbol{l_i}} \sum_{(j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})} \sum_{\boldsymbol{l_{ik}} - \boldsymbol{l}+1} \sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - \cdots} \sum_{\boldsymbol{l_{sa}} + \cdots - j_{sa}+1} \sum_{j_i = \boldsymbol{l_{sa}} + \boldsymbol{n} + s - D - j_{sa}} \sum_{n} \sum_{\boldsymbol{n}+\mathbb{k}\ (n_{is} = \cdots - j_s + 1)} \sum_{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1} \sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_{sa} + j^{sa} - j_i} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)} \sum_{n_s = \boldsymbol{n} - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}}}$$

$$\boldsymbol{l_{ik}} + s - \quad j_{sa}^{ik} + 1$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \ (j^{sa} = j_i + \boldsymbol{l_s} - \boldsymbol{l_i}) \ j_i - \quad + s - j_{sa}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \ (n_i - j_s + 1) \quad \sum_{n_{ik} = \quad j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \quad + j_{ik} - j^{sa}} \ n_s = n_{sa} + j^{sa} - j_i$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + \quad - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \quad D - \boldsymbol{n} \quad 1 \wedge$

$D + \quad + s - \boldsymbol{n} - \boldsymbol{l_i} \quad 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \quad - j_{sa}^{ik} \leq j \quad \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$\quad \boldsymbol{n} \quad \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \ \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \ \sum_{\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1}
$$

$$
(n_{ik}+ \quad -j^{sa}-\mathbb{k}_2)\ n_{sa}+ \quad -j_i
$$

$$
\sum_{\boldsymbol{n}-j^{sa}+}^{} \ \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)\ (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} \quad - j_{ik} - \mathbb{k}_1 \quad 1)!}{(j_{ik} \quad j_s - 1)! \cdot (n \quad + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{n \quad - \quad - \mathbb{k}_2 - 1)!}{(j^{sa} \quad - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \left(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i}\right) \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \left(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1\right) \sum_{n_{ik}=n_{is}+j_s-j_{ik}}^{(n_i-j_s+1)}$$

$$\left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right) \sum_{n_s=}^{(\ )} {}_{+j^{sa}-j_i}$$

$$\frac{(n_s \quad ;^s)!}{(n_s+j_i \quad \boldsymbol{n}-j_{sa}^s)! \quad j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{j}} \quad \boldsymbol{l}-1)!}{j_s-\boldsymbol{l}+1)! \cdot (j_s-2)!}$$

$$\frac{(D}{(D+ \quad -\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D \quad \boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j \quad j_{sa}^{ik}-1 \leq j_{i} \quad \leq j^{sa}+ \quad j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa} \quad s \wedge j^{sa}+s \quad j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \quad \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \quad \boldsymbol{l_{ik}} \wedge \quad +j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \quad \boldsymbol{n} < n \wedge \quad =\mathbb{k}>$

$j_{sa} < j_{sa}^{i}-1 \wedge j_{sa}^{i} \quad j_{sa}-1 \quad j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \quad \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k} \quad j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = \quad \mathbb{k} \wedge$

$\mathbb{k} \quad = \quad \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \left(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}}\right)$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \left(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D\right) \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j_{ik}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{l}}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{(j_{sa}=j^{sa}+j_{sa}-\boldsymbol{l})}\ \sum_{(\boldsymbol{l_{sa}}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{\boldsymbol{n}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$

$\mathbf{l_{ik}} - j_{sa}^{ik} + 1 = \mathbf{l_s} \wedge \mathbf{l_{sa}} + j_{sa}^{ik} - j_{sa} > \mathbf{l_{ik}} \wedge \mathbf{l_i} + j_{sa} - s = \mathbf{l_{sa}} \wedge$

$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\mathbf{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\mathbf{l}}^{\text{[illegible]}} \sum_{(j_s=\text{[illegible]}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(\mathbf{l_{ik}}\text{[illegible]}j_{sa}^{ik}\text{[illegible]})}$$

$$\sum_{j_{ik}=j_s+\text{[illegible]}\mathbf{l_s}}^{\text{[illegible]}} \sum_{(j^{sa}=\text{[illegible]}\mathbf{n}-D)}^{(\mathbf{l_{sa}}\text{[illegible]})} \sum_{j_i=j^{sa}+\mathbf{l_i}-\mathbf{l_{sa}}}^{\text{[illegible]}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\text{[illegible]}\mathbb{k}-j_s+1)}^{(\text{[illegible]}-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l_s} - \mathbf{l} - 1)!}{(\mathbf{l_s} - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2\right)}\ \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )}\ \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right.}\ \sum_{}^{}\ -\boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_i-j_s+1)}\ \sum_{}^{}\ \sum_{j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=}^{(\ )}\ \sum_{j_{ik}-j^{sa}-}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+\ -\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\ D-\boldsymbol{n}+\ \wedge$

$D+\ +s-\boldsymbol{n}-\boldsymbol{l_i}+\ \leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\ j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+\ -j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\ =\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$\ \wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

GÜLDÜNYA

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} \sum_{j_{ik}+1}
$$

$$
(n_{ik} \quad -j^{sa}-\mathbb{k}_2)\ n_{sa} \quad -j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - \quad)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} \quad n_{ik} - \mathbb{k}_1 \quad 1)!}{(j_i \quad j_s - 1)! \cdot (n \quad + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n \quad - \mathbb{k}_2 - 1)!}{(j^{sa} \quad 1)! \cdot \quad _{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{\quad - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}
$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right) \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{(n_s^{s}\ )!}{(n_s+j_i\ \ \boldsymbol{n}-j_{sa}^{s})!\ \ (\ \ j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{s}}\ \ \boldsymbol{l}-1)!}{\ \ j_s-\boldsymbol{l}+\ \ )!\cdot(j_s-2)!}$$

$$\frac{(D}{(D+\ \ -\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq \ \ ^{sa}+j_{sa}^{ik}-j_{\ \ } \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_{i\ \ }{}_{sa}-s \wedge j^{sa}\ \ -j_{sa}\ \ \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}\ \ _a = \boldsymbol{l_{ik}} \wedge \boldsymbol{l}\ \ j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \ \ > 0 \wedge$

$j_{\ \ } \leq j_{sa}^{i}-1\ \ _{sa}^{ik} < j_{sa}\ \ -1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{\ \ , \cdots, \mathbb{k}_1, j_{sa}^{ik}, \ \ \mathbb{k}_2, j_{sa}, \ \ \} \wedge$

$\ \ > 5 \wedge \ \ = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k}\ \ \mathbb{k}_1+\ \ _2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \left(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i}\right) \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{sa} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s - \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\quad)} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = j_i + \boldsymbol{l_{sa}} - \boldsymbol{l_i})}^{(\ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_{sa}^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = \boldsymbol{l_s} + \boldsymbol{n} - D)}$$

$$\sum_{(j_{ik} = j^{sa} + \boldsymbol{l_{sa}})} \sum_{(j^{sa} = \boldsymbol{l_i} + j_{sa} - D - s)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l}}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(j_s+\boldsymbol{n}-D)}\ \sum_{n_i=\boldsymbol{n}}^{n}\ \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}_1}^{n_i-j_s+1}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-}$$

$$\frac{(n_s-)!}{(n_s-\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + - j_{sa}^{ik} \leq j \leq j_i + j_{sa} - s \wedge sa + - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \wedge \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} \quad 0 \wedge$

$j_{sa} \leq j_{sa}^{s} \quad 1 \wedge j_{sa}^{ik} < j_s \quad 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j \quad , j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \quad 5 \wedge s \quad s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \quad \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\,(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-S}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{\epsilon z}S_{j_{sa},j_{sa},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}$$

$$\sum_{\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-$$

$$\frac{(D-$$

$$\sum_{k=}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{i=}^{(D-s+1)}$$

$$\sum_{k=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-1}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}+j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{\left(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}\right)!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-}^{}\ -\boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(}^{(n_i-j_s+1)}\sum_{n_{ik}=}^{}\ +j_s-j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=}\sum_{+j_{ik}-j^{sa}}\sum_{)\,n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+\ -\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\ -\boldsymbol{n}\ -1\wedge$

$2\leq\ \leq j_{ik}-j_{sa}^{ik}+\ \wedge j_s+j_{sa}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}\ -j_{sa}^{ik}\leq j^{sa}\leq\ +j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-\ +1>\boldsymbol{l_s}\ -\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge\ =\mathbb{k}>0\wedge$

$<j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+j^{sa}+1)}^{(n_{ik}+j_{ik}-\boldsymbol{n}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j^{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = \boldsymbol{l_s} + \boldsymbol{n} - D)}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}-1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}-1)!\cdot(j_{ik}-j_s-$$

$$\frac{(\boldsymbol{D}-\boldsymbol{l_i})!}{(\boldsymbol{n}-\boldsymbol{l_i}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l}-\boldsymbol{l}+1)}\sum_{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}}^{(\quad)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}}^{(\quad)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(\quad)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{=\boldsymbol{n}+\mathbb{k}-j_s}^{(\quad)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\quad)}$$

$$\sum_{(n_{sa}=n_{ik}+\quad-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\quad)}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} \quad \wedge \boldsymbol{l_s} > D - \quad + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} - j_{sa} \quad j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{+\mathbb{k}_2}^{n_{is}+\ -j_{ik}-\mathbb{k}_1} \sum_{j_{ik}+1}
$$

$$
(n_{ik}+j_{\ } \quad j^{sa}-\mathbb{k}_2)\ n_{sa}+j_{\ } \quad j_i
$$

$$
\sum_{-j^{sa}+1} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is}}{j_s - 2)!\cdot(n_i - n_{is} - j_s + 1)!}\cdot
$$

$$
\frac{(n_{is} - \ _{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \ j_s - 1)!\cdot(n_{\ } + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}\cdot
$$

$$
\frac{-\ \ - \mathbb{k}_2 - 1)!}{(j^{sa} - \ \ - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{\ _i - j^{sa} - 1)!\cdot(n_{sa} + j^{sa} - n_s - j_i)!}\cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)!\cdot(\boldsymbol{n} - j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)!\cdot(j_s - 2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})!\cdot\left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!}\cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})!\cdot(\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}-\mathbb{k}_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{ik}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l}_{\boldsymbol{i}}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+$ $-s=$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_s$ $, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=\boldsymbol{n}-j_i+1} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\boldsymbol{l}_{ik}-\boldsymbol{l}+1)!\cdot(\boldsymbol{l}_{ik}-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}+1)!}{(j_s+\boldsymbol{l_{ik}}-\boldsymbol{n}-D-1)!\cdot(j_{ik}-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}-1)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}\sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{\boldsymbol{l_{sa}}}^{j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1}\sum_{j_{ik}=}^{j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right)}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\quad-j_i)!}$$

$$\sum_{k=}\ \sum_{=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}}$$

$$\sum_{j_{ik}=j_s}\ \sum_{+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \quad n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_i \quad j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$\quad\quad j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-\boldsymbol{l}}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{}^{(n_i-j_s}
$$

$$
\sum_{(n_{sa}=}^{(}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \quad)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(\quad n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \quad j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\quad_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+\ldots}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\ldots^{sa}+1)}^{(n_{ik}+j_{ik}\ldots\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j\ldots}^{n_{sa}\ldots j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+s+\boldsymbol{n}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\,(\boldsymbol{n}-j^{sa}}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-}{(\boldsymbol{l_s}-j_s}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_{ik} + s - j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \quad + j_{sa} - s = \quad \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \quad j_{sa}^{s} < j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik} \quad \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{s}$

$s \geq 5 \wedge \boldsymbol{s} = \quad + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \quad + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot \frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot \frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l}-j_{ik}-\boldsymbol{l_{ik}})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)} \sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s -$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!}$$

$$\frac{(\quad \boldsymbol{l} - 1)}{(\boldsymbol{l_s} - \quad - \boldsymbol{l} + 1)} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa} + 1)!}{(j_s + \boldsymbol{l_{ik}} - \quad)! \cdot (j_{ik} - \quad - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - \boldsymbol{l_i})}{(D + j_i \quad \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = \boldsymbol{l_{ik}} + \boldsymbol{n} + j_{sa} - D - j_{sa}^{ik})}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

GÜLDÜNYA

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{Z} \ldots = \sum_{\ldots} \sum_{\ldots}^{(j_{ik} - j_{sa}^{ik} + \ldots} \ldots (\ldots + \boldsymbol{n} - D)$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + j_{sa} \ldots} \sum_{(j \ldots j_{ik} + \boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i \ldots + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{\left(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s}\right)! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l}_{ik}}^{(\ )} \sum_{j^{sa}} -\boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{+1)}^{(n_i-j_s+} \sum_{+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{} \frac{(n_i - n_{is} - 1)!}{(j_s -)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{\left(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s}\right)! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \ \sum_{n_{ik}=n_{is}+}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \ \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_{sa})!}{(n_s-\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n}$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}$

$j_{ik} +$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k}$

$\boldsymbol{s}: \{j_s^s, \cdots, \mathbb{k}_1, j$

$s > 5 \wedge \boldsymbol{s}$

$\mathbb{k}_z: z = 2$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

GÜLDÜNYA

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ \ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i - 1)}{(j_s - 2) \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k} - 1)!}{(j_{ik} - j_s - 1 + j_s - n - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n - \mathbb{k}_2 - }{(j^{sa} - j_{ik} - 1 (n_{ik} + - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{sa - n_s - 1)!}{(j_i - j^{sa} - 1) (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ \ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s\quad)!}\cdot$$

$$\frac{(n_s\quad-1)!}{+j_i\quad-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\quad-j_{sa}^{ik}+1)!}{(j_s+\quad-j_{ik}-\boldsymbol{l}\quad)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\quad)} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ \ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )}\sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{(\ )}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<\boldsymbol{l_s}\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

GÜLDÜNYA

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=k+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} $$

$$ \sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{s}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}} $$

$$ \sum_{n_i=\boldsymbol{n}+1}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_i-j_s+1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot $$

$$ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot $$

$$ \frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} - $$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_s)!}{(n_s-\boldsymbol{n}-\boldsymbol{l_i}-j^{sa})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq \boldsymbol{l_s} - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 < j_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} < j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} - \boldsymbol{n} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 < j_{sa}^{ik} < j_{sa}^{s} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}, \cdots, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} < s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)\,(n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{i} - n_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - j_s - 1)\,(n_{i} - n_{is} - n_{ik} + j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)\,(n_{ik} + j_{sa} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)\,(n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}$$

$$\frac{(D-\boldsymbol{l}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!}$$

$$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$$

$$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{}\leq j^{sa}+j_{sa}$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\ ;\ j^{sa}+s-j_{}\leq j_i\leq$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l}\wedge\boldsymbol{l_i}+j_{sa}-=\boldsymbol{l_{sa}}\wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^i-1\wedge j_{sa}^{ik}<j_{sa}-\ ;\ j_{sa}^s<j_{s}\ 1\wedge$$

$$\boldsymbol{s}:\{j_{sa}^s,\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\ j_{sa}^i\}\wedge$$

$$s>5\wedge\boldsymbol{s}=s+\wedge$$

$$\mathbb{k}_z:z=2\wedge\ =\mathbb{k}_1+\ \Rightarrow$$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\ \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \quad)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} \quad n_s - j_i)!}$$

$$\frac{\quad - 1)!}{(n_s + \quad - \boldsymbol{n} - 1) \quad - j_i)!} \cdot$$

$$\frac{(\quad - \boldsymbol{l} - 1)!}{\quad - j_s - \boldsymbol{l} \quad)! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_{ik}} \quad - j_{sa}^{ik} + \quad}{(j_s + \boldsymbol{l_{ik}} \quad - \boldsymbol{l_s}) \quad (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D \quad \boldsymbol{l_i})!}{(D + \quad - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = j_i + \boldsymbol{l_{sa}} - \boldsymbol{l_i})}^{(\ )} \sum_{j_i = \boldsymbol{l_{sa}} + \boldsymbol{n} + s - D - j_{sa}}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_2(\boldsymbol{l}, \ldots, j_{ik}, j^{sa}, j_{sa}) = \sum_{\boldsymbol{l}=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{=\boldsymbol{n}+\mathbb{k}-j_s} n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=n_{ik}} \sum_{-j^{sa}-\mathbb{k}_2)} n_s=n_{sa}+j^{sa}-j_i$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n}$ $\wedge \boldsymbol{l_s} > D -$ $+ 1 \wedge$

$D + \boldsymbol{l_s} + s -$ $\boldsymbol{l_{ik}} \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

2 $j_s \leq$ $- j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} -$ $_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=}^{\ \ +\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-\ \ -\mathbb{k}_1}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{\ \ }_{\ \ }\ \ )\ n_{sa}+j^{sa}-j_i} \sum_{\ \ -j_i+1}
$$

$$
\frac{(n_{\ \ }-n_{is}-1)!}{(j_s-2)!\cdot(n_{\ \ }-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{\ \ }-\mathbb{k}_1-1)!}{(\ \ -j_s-1)!\cdot(\ \ +j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{\ \ }-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}^{} \sum_{+j^{sa}-j_i}$$

$$\frac{(n_s}{(n_s+j_i}$$

$$\frac{(\boldsymbol{l_s}}{}$$

$$\frac{(D}{(D+}$$

$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

$$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s}$$

$$D$$

$$j_{sa}$$

$$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2$$

$$s > 5 \wedge \boldsymbol{s} =$$

$$\mathbb{k}_2$$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+\boldsymbol{n}+s-D-j_{sa}^{ik}}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\quad-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-\quad-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-\quad-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-\quad-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\quad+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\quad-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\quad)} \sum_{j_i=\boldsymbol{l_{ik}}+s+\boldsymbol{n}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_s - j_{sa}^{s})!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^{s})! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l}-1)}{(\boldsymbol{l_s}-\boldsymbol{l}+1)\,(-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}+1)!}{(j_s+\boldsymbol{l_{ik}}-)!\cdot(j_{ik}-\quad-j_{sa}^{ik}+1)!}$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{}\sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

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$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,\ldots,j_{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\ldots+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\ldots+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ -j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_i}^{}{}_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{}^{}{}_{sa}-j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l}}^{}\ \sum_{i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{}$$

$$(\quad j_s+1)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{}\ \sum_{=\boldsymbol{n}+\mathbb{k}-j_s}^{}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{}$$

$$\sum_{(n_{sa}=n_{ik}}^{(\quad)}\ \sum_{-j^{sa}-\mathbb{k}_2)\ n_s=n_{sa}+j^{sa}-j_i}^{}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < \quad \wedge \boldsymbol{l_s} > D - \quad + 1 \wedge$

$2 \leq j_s \leq j_{ik} - \quad {}_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad {}_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} j_{ik}+1
$$

$$
(n_{ik}+ -j^{sa}-\mathbb{k}_2)\ n_{sa}+ -j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is}}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is} \quad n_{ik}-\mathbb{k}_1-1)!}{(j_{ik} \quad j_s-1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{n_{ik}-n \quad -\mathbb{k}_2-1)!}{(j^{sa} \quad -1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}+n-D}}^{\boldsymbol{l_{ik}-l+1}} \sum_{(j^{sa}=\boldsymbol{l_{sa}+n-D})}^{(\boldsymbol{l_{sa}-l+1})} \sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_i-l+1}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_2-1)!}{(j_{ik}-j_s-1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!}$$

$$\frac{a}{(j_i-j^{sa}-1)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\,(\boldsymbol{n}-j^{sa}}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-}{(\boldsymbol{l_s}-j_s}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} \quad _{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_{ik} + s - j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \quad + j_{sa} - s > \quad \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \quad _{sa}^{s} < j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik} \quad \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{s}$

$s \geq 5 \wedge \boldsymbol{s} = \quad + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \quad + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GULDUNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s\quad)!}\cdot$$

$$\frac{(n_s\quad-1)!}{+j_i\quad-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s\quad\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}\quad\boldsymbol{l_{ik}}-j_{sa})!}{+\boldsymbol{l_{sa}}\quad^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}\quad\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j_{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j_{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$j_{sa}^{ik}-j_{sa}\ (\boldsymbol{l}_{\boldsymbol{sa}}+j_{sa}-D-s-1)\quad \boldsymbol{l_i}-\boldsymbol{l}+1$$

$$\sum_{=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}\quad (j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)\quad \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D+\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik}+1)}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{\boldsymbol{l_{ik}}=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_i}^{\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\left(j^{s}\right.\sum_{+j_{sa}-\boldsymbol{l}-j_{sa}^{}}^{(\boldsymbol{l_{sa}}-1)}\left.\right)\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{(\quad-1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{(\quad+j_{ik}-j}\sum_{n_s=\boldsymbol{n}-j_i+1}^{-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

GÜLDÜNYA

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j^{ik}_{sa}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j^{ik}_{sa}+1)}\ \sum_{j_i=}^{j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s}^{}\ \mathbb{k}_1$$

$$\sum_{(n_{sa}=n_i}^{(\ )}\ \sum_{-j^{sa}}^{}\ +j^{sa}-j_i$$

$$\frac{(n_s-j^s_{sa})!}{(n_j-j_i-\boldsymbol{n}+j^s_{sa})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j^{ik}_{sa}+1 \leq j_i+j^{ik}_{sa}-1 \leq j_{ik} \leq j^{sa}+j^{ik}_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j^{ik}_{sa} \leq j_i \leq j_i+j_{sa}-s \leq j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j^{ik}_{sa}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge \mathbb{k} = \mathbb{k} > \wedge$

$j_{sa} < j_{sa}-1 \wedge j^{ik}_{sa} < j_{sa}-1 \wedge j^{s}_{sa} < j^{ik}_{sa}-1 \wedge$

$\boldsymbol{s}: \{j^s_{sa}, \cdots, \mathbb{k}_1, j^{ik}_{sa}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j^i_{sa}\} \wedge$

$s > 1 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

GULDUNYA

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-} \sum_{=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{ik}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

GÜLDÜNYA

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{sa}}+\boldsymbol{l_{sa}}^{j^{sa}}-\boldsymbol{l_{ik}})!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

GÜLDÜNYA

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} \quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^i\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_s})}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s - 1} \quad \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \quad \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \quad \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \quad \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \quad \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\,(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\quad+j_{sa}^{ik}-\quad-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-\quad)!\cdot(j_i+\quad-j^{sa}-s)!}$$

$$\frac{(D-\boldsymbol{l_i}\quad)}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}-j_{sa}^{ik}-D-s}^{-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right.}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}-\boldsymbol{l}+1}^{(\ )}\ \sum_{\boldsymbol{n}+j_{sa}^{ik}-D-s\ (j^{sa}+j_{ik}+j_{sa}-j_{sa}^{ik})\ j_i=j^{sa}+s-j_{sa}}^{(\ )}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\ (n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-\ 1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_s=n_{sa}+j^{sa}-j_i}^{(\ )}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s \ldots + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j \ldots + \boldsymbol{n}-D)}^{(\boldsymbol{l_s} \ldots \boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_i} \ldots D}^{\ldots \boldsymbol{l}+1}
$$

$$
\sum_{\ldots + \mathbb{k}}^{n} \sum_{(n_{is} \ldots \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} \ldots - j_{ik} + 1}^{\ldots + j_s - j_{ik} - \mathbb{k}_1}
$$

$$
\sum_{\ldots = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + \ldots j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_{is}=}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=\boldsymbol{n}-}^{(n_{ik}+j_{ik}-\mathbb{k}_2)}\ \sum_{}^{n_{sa}+j^{sa}-}$$

$$\sum_{}^{\boldsymbol{n}-j_i+1}$$

$$\frac{-n_{is}-1)!}{-2)!\cdot(-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}+\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_s-j_{sa})!}{(n_s-\boldsymbol{n}-j_{sa}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n}$ $1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}$ $1 \leq j_{ik} \leq$ $^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} +$ $- j_{sa}^{ik} \leq j$ $\leq j_i + j_{sa} - s \wedge$ $^{sa} +$ $- j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1$ $\wedge \boldsymbol{l_{sa}}$ $^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k}$ $0 \wedge$

$^{a} \leq j_{sa}^{i}$ $1 \wedge j_{sa}^{ik} < j_s$ $- 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_s^s, \cdots, \mathbb{k}_1, j$ $, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s >$ $5 \wedge \boldsymbol{s}$ $s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2$ $\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i - 1)}{(j_s - 2) \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k} - 1)!}{(j_{ik} - j_s - 1 + j_s - n - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n - \mathbb{k}_2 -)}{(j^{sa} - j_{ik} - 1 \cdot (n_{ik} + - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{sa - n_s - 1)!}{(j_i - j^{sa} - 1) \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{k + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-j_{ik}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\quad)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_s-j_{sa}^s)!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^s)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\quad)!} \frac{(D-\boldsymbol{l}_{\quad}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\quad(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq \quad \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \quad \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{\quad}-s > \boldsymbol{l}_{\quad} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik} \quad \wedge$

$\boldsymbol{s}: \{j_{sa}^s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{s\quad}, \quad, j_{sa}^{i}\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \quad + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)} \sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l}-1)}{(\boldsymbol{l_s}-\boldsymbol{l}+1)(-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}(j^{sa}+j_{s}-j_{ik}-j_{sa})!}$$

$$\frac{(\boldsymbol{l_i}+-\boldsymbol{l_{sa}}-s)}{(j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}})!(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-_{k}-j_{sa}\right)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+}\sum_{(}\sum_{j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-j_{sa}^{s})!}{(n_s+j_i-\boldsymbol{n}-j_{sa}^{s})!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

GÜLDÜNYA

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} \sum_{\cdots} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\boldsymbol{l_{ik}}-\cdots \boldsymbol{l}+1) \quad \boldsymbol{l_i}-\boldsymbol{l}+1
$$

$$
\sum_{j_{ik}} \cdots \sum_{+\boldsymbol{n}-D\ (j} \cdots \sum_{\boldsymbol{l_{sa}}+\boldsymbol{n}-D)\ j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}
$$

$$
\sum^{n} \cdots -j_s+1) \quad n_{is}+j_s-j_{ik}-\mathbb{k}_1
$$

$$
\sum_{\boldsymbol{n}+\mathbb{k}\ (n_{is}=\boldsymbol{n}} \cdots -j_s+1)\ n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1
$$

$$
(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_i + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - \boldsymbol{l_{ik}}} \sum_{(j^{sa} = j_i + j_{sa} - \boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_{ik}} + \boldsymbol{l_{ik}} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \boldsymbol{n} - j_{sa}^s)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

GÜLDÜNYA

DİZİN

B

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.1.1.1/3-4
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.1.2.1/3-4
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.1.3.1/3-4
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.1.1.1/230-231
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.1.1/187-188
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.2.1.1/230-231
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.2.1/187-188
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.2.1.1/230-231
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.3.1/187-188
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.4.1.1/3-4
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.4.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.4.2.1/3-4
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.4.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.4.3.1/3-4
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.4.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu

GÜLDÜNYA

simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.1.1.1.1/233

tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.1.1/190

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.1.1.2.1/233

tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.2.1/190

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.1.1.3.1/233

tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.3.1/190

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.1.6.1/3-4

tek kalan düzgün simetrik olasılık, 2.3.3.2.1.6.1.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.1.6.2.1/3-4

tek kalan düzgün simetrik olasılık, 2.3.3.2.1.6.2.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.1.6.3.1/3-4

tek kalan düzgün simetrik olasılık, 2.3.3.2.1.6.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.1.1.1.1/118

tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.1.1/80-81

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/165

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin durumuna

tek kalan simetrik olasılık, 2.3.3.1.1.2.1/118

tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.2.1/80-81

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/165

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.1.1.3.1/118

tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.3.1/80-81

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/165

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.1.1.1/4

tek kalan düzgün simetrik olasılık, 2.3.3.2.2.1.1.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

GÜLDÜNYA

tek kalan simetrik olasılık, 2.3.3.1.2.1.2.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.1.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.1.3.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.1.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.2.1.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.2.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.2.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.2.2.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.2.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.2.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.2.3.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.2.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.2.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.4.1.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.4.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.4.2.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.4.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.4.3.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.4.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.6.1.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.6.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.6.2.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.6.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

GÜLDÜNYA

tek kalan simetrik olasılık, 2.3.3.1.2.6.3.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.6.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.2.7.1.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.7.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.7.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.2.7.2.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.7.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.7.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.2.7.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.7.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.7.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.3.1.1.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.3.1.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.3.1.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.3.1.2.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.3.1.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.3.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.3.1.3.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.3.1.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.3.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.3.2.1.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.3.2.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.3.2.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.3.2.2.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.3.2.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.3.2.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.3.2.3.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.3.2.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.3.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin herhangi iki durumuna bağlı

GÜLDÜNYA

tek kalan simetrik olasılık, 2.3.3.1.4.1.1.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.4.1.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.4.1.1.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin herhangi iki durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.4.1.2.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.4.1.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.4.1.2.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin herhangi iki durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.4.1.3.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.4.1.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.4.1.3.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.4.1.1.1/839-840
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.4.1.2.1/839-840
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.4.1.3.1/839-840
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.5.1.1.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.5.1.1.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.1.1.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.5.1.2.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.5.1.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.1.2.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.5.1.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.5.1.3.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.1.3.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.5.2.1.1/6
tek kalan düzgün simetrik olasılık, 2.3.3.2.5.2.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.2.1.1/10
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.5.2.2.1/6
tek kalan düzgün simetrik olasılık, 2.3.3.2.5.2.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.2.2.1/10
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.5.2.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.5.2.3.1/3-4

GÜDÜMYA

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.2.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.1.1.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.1.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.1.2.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.1.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.1.3.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.1.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.2.1.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.2.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.2.2.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.2.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.2.3.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.2.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.1.1.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.1.2.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.1.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.2.1.1/6

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.2.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.2.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

GÜLDÜNYA

tek kalan simetrik olasılık, 2.3.3.1.6.2.2.1/6
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.2.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.2.2.1/8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.2.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.2.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.2.3.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.4.1.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.4.1.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.4.1.1/5-6
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.4.2.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.4.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.4.2.1/5-6
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.4.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.4.3.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.4.3.1/5-6
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.6.1.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.6.1.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.6.1.1/5-6
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.6.2.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.6.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.6.2.1/5-6
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.6.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.6.3.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.6.3.1/5-6
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.7.1.1/6
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.7.1.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.7.1.1/8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.7.2.1/6
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.7.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.7.2.1/8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

GÜLDÜNYA

tek kalan simetrik olasılık, 2.3.3.1.6.7.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.7.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.7.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.1.1.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.1.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.1.2.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.1.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.1.3.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.1.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.2.1.1/11
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.2.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.2.2.1/11
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.2.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.2.3.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.2.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.4.1.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.4.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.4.2.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.4.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.4.3.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.4.3.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.6.1.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.6.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son

GÜDÜNYA

durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.6.2.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.6.2.1/11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.6.3.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.6.3.1/11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.7.1.1/11
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.1.1/11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.7.2.1/11
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.2.1/11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.7.3.1/11
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.3.1/7-8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.1.1.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.1.1.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.1.1.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.1.2.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.1.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.1.2.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.1.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.1.3.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.1.3.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.2.1.1/7
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.2.1.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.1.1/10-11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.2.2.1/7
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.2.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.2.1/10-11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.2.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.2.3.1/3-4

GÜLDÜNYA

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.4.1.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.4.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.4.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.4.2.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.4.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.4.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.4.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.4.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.4.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.6.1.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.6.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.6.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.6.2.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.6.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.6.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.6.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.6.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.6.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.7.1.1/7

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.7.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.7.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.7.2.1/7

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.7.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.7.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.7.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.7.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.7.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.1.1.1/9

GÜLDÜNYA

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.1.1.1/10
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.10.1.2.1/9
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.1.2.1/10
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.10.1.3.1/9
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.1.3.1/10
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.10.2.1.1/15-16
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.2.1.1/16
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.10.2.2.1/15-16
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.2.2.1/16
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.10.2.3.1/9-10
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.2.3.1/10
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.10.4.1.1/9
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.4.1.1/16
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.10.4.2.1/9
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.4.2.1/16
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.10.4.3.1/9
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.4.3.1/16
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.10.6.1.1/9
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.6.1.1/16
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.10.6.2.1/9
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.6.2.1/16
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.10.6.3.1/9

GÜDÜMYA

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.6.3.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.7.1.1/15-16

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.7.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.7.2.1/15-16

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.7.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.7.3.1/9-16

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.7.3.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.1.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.1.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.1.2.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.1.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.1.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.1.3.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.2.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.3.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.2.1/10

GÜDÜMYA

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.2.1/17-18
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.11.4.3.1/10
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.3.1/17-18
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.11.6.1.1/10
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.1.1/17-18
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.11.6.2.1/10
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.2.1/17-18
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.11.6.3.1/10
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.3.1/17-18
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.11.7.1.1/17
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.1.1/17-18
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.11.7.2.1/17
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.2.1/17-18
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.11.7.3.1/10
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.3.1/10-11

GÜDÜNYA

VDOİHİ'de Olasılık ve İhtimal konularının tanım ve eşitlikleri verilmektedir. Ayrıca VDOİHİ'de olasılık ve ihtimalin uygulama alanlarına da yer verilmektedir. VDOİHİ konu anlatım ciltleri ve soru, problem ve ispat çözümlerinden oluşmaktadır. Bu cilt bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz olasılık dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu hariç dağılımın başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımın aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılığın, tanım ve eşitliklerinden oluşmaktadır.

VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık kitabında, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu hariç dağılımın başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımın aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılığın, tanım ve eşitlikleri verilmektedir.

VDOİHİ'nin diğer ciltlerinde olduğu gibi bu ciltte de verilen ana eşitlikler, olasılık tablolarından elde edilen verilerle üretilmiştir. Diğer eşitlikler ise ana eşitliklerden teorik yöntemle üretilmiştir. Eşitlik ve tanımların üretilmesinde dış kaynak kullanılmamıştır.

GÜLDÜNYA