VDOİHİ

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

Cilt 2.3.3.3.5.1.1.40

İsmail YILMAZ

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VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık Cilt 2.3.3.3.5.1.1.40

İsmail YILMAZ

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1. Bağımlı durumlu simetrinin ilk ve herhangi iki 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

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

simgesi yerine

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

simgesi olmalı.

d

Yazar Hakkında

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

VDOİHİ

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

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- ✓ Makinaların insan gibi düşünebilmesini, karar verebilmesini ve davranabilmesini sağlayacak gerçek yapay zekayla ilişkilendirilmiştir.
- ✓ 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 Üç Duruma Göre Tek Kalan Düzgün Olmayan Simetrik Ola... 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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$_{fz,0}S^{DOST}_{j_s,j_{ik},j^{sa},j_i}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı

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 paydan dağıtılmaya başlanarak tabloları elde edilir. Bu bölümde verilen eşitlikler, bu yöntemle elde edilen kurallı tablolara göre verilmektedir. Farklı dizilimsiz dağılımlarda durumların küçükten-büyüğe sıralanmasıyla elde edilebilen kurallı tablolar kullanılmaktadır. Farklı dizilimsiz dağılımlarda durumların küçükten-büyüğe sıralama için verilen eşitliklerde kullanılan durum sayılarının düzenlenmesiyle, büyükten-küçüğe sıralama durumlarının eşitlikleri elde edilebilir.

Farklı dizilimsiz dağılımlar, dağılımın ilk durumuyla başlayan (bunun yerine farklı dizilimli dağılımlarda simetrinin ilk durumuyla başlayan dağılımlar), dağılımın ilk durumu hariçinde dağılımın herhangi bir durumuyla başlayan dağılımlar (bunun yerine farklı dizilimli dağılımlarda simetride bulunmayan bir durumla başlayan dağılımlar) ve dağılımın ilk durumu hariç olacak 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 dağılımın başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımın aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılığın eşitlikleri verilmektedir.

GÜLDÜNYA

SİMETRİDEN SEÇİLEN ÜÇ DURUMA GÖRE TEK KALAN DÜZGÜN OLMAYAN SİMETRİK OLASILIK

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

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

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

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

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

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

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

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

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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

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

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

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

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

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

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

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

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

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

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

$$\left(\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}}^{ik}{}_{sa}+1)\right.$$

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

$$\sum_{\boldsymbol{l_{ik}}+\boldsymbol{n}-D}\quad\sum_{a=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$(\quad j_s+1)$$

$$\sum\quad\sum$$

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

$$n_{is}+\quad -j_{ik}-\mathbb{k}_1\quad {}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)$$

$$\sum$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$s > 3 \wedge \quad = s + \mathbb{k} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$s > 3 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

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

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

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

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

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

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

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

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

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

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

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

$$\left(\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}}^{\quad}{}_{sa}^{ik}+1)\right.$$

$$j^{sa}+(\quad-j_{sa}-1\quad(\quad)$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}\sum_{i^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$(\quad j_s+1)$$

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

$$n_{is}\quad-j_{ik}-\mathbb{k}_1\quad{}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$s > 3 \wedge \boldsymbol{s}=s+\mathbb{k}$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$s > 3 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

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

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

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

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

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

GÜLDÜNYA

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GÜLDÜNYA

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

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

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

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

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

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

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

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

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

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

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

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

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

GÜLDÜNYA

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

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

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

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

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

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

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

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

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

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

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

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

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

$s > 3 \wedge \boldsymbol{s} = s+\mathbb{k}$

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

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

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

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

GULDUNYA

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GÜLDÜNYA

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

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

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

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

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

$$\boldsymbol{l_s}\quad D-j_{sa}-1\quad \boldsymbol{l_{sa}}-\boldsymbol{l}+1)$$

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{(n_i=}^{(}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$s>3\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$s>3 \wedge \boldsymbol{s}=s+\mathbb{k}$

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

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

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

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

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

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

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

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

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

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{[illegible]} \sum_{(j_s = \boldsymbol{l_{sa}} + \boldsymbol{n} - D - [illegible] + 1)}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} - [illegible] + 2)} \right.
$$

$$
\sum_{j_{ik} = [illegible] j_{sa}^{ik} - 1} \sum_{(j^{sa} [illegible] - j_{sa}^{ik})}^{(\ )}
$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k}$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GÜLDÜNYA

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}$

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

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

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

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

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

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

$\quad > 3 \wedge \quad s+\mathbb{k} \wedge$

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

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

GÜDÜMYA

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

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

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

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

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

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

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

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

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

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

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

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

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

GÜLDÜNYA

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$(\boldsymbol{l_s} + j_{sa}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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

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

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

$$
(n_i - j_s
$$

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

$$
n_{is} - j_{ik}-\mathbb{k}_1 \quad {}^{j^{sa}-\mathbb{k}_2)}
$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l}$

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

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

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

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

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

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

$s > 3 \wedge \boldsymbol{s} = s \quad \mathbb{k} \wedge$

$\mathbb{k}_2 \quad = \quad \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{[illegible]}\sum_{(\boldsymbol{l_s}-\boldsymbol{l}+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}-[illegible]-\boldsymbol{l}+1}^{[illegible]+j_{sa}^{ik}-\boldsymbol{l}-[illegible]+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$s>3\wedge \boldsymbol{s}=s+\mathbb{k}\wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$s>3 \wedge \boldsymbol{s}=s+\mathbb{k}$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\boldsymbol{l_{sa}}\qquad +1\qquad (\quad)$$

$$\sum_{j_{ik}=\boldsymbol{n}+j_{sa}^{ik}-j_{sa}}\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}}$

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

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

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

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

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

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

$\quad > 3 \wedge \quad s + \mathbb{k} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-j_{sa}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

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

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

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

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

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

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

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l}$

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

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

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

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

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

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

$s > 3 \wedge \boldsymbol{s} = s\ \ \mathbb{k} \wedge$

$\mathbb{k}_2\ \ = \ \ \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{[illegible]}\sum_{[illegible]}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}[illegible]-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}[illegible]}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{([illegible])}$$

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

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

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

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

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

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

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

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

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

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

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

$$\sum^{(n_i + 1)}$$

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

$$\sum_{=n_{is}+j_s-}^{(\ )} {}_{\mathbb{k}_1\ (n_{sa}-}{}_{sa}-\mathbb{k}_2)$$

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

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

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

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

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

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

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

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

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

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

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

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$s > 3 \wedge \boldsymbol{s} = s +$ $\wedge$

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

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

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

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

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

GÜLDÜNYA

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GÜLDÜNYA

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GÜLDÜNYA

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

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

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

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

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

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

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

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l}\wedge$

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

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

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

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

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

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

$s>3\wedge\boldsymbol{s}=s-\mathbb{k}\wedge$

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

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

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

GÜLDÜNYA

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GÜLDÜNYA

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{\boldsymbol{l_{ik}}=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{ik}}-\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{\boldsymbol{l_{sa}}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{n})}$$

$$\sum_{n_i=n_{is}-\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1)}$$

$$\sum_{n_{ik}=n_{sa}-\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\left.\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\right) -$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\ \mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(\ =n_{ik}+j_{ik}-j^{sa}-}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-\ -j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_{\ })!\cdot(\boldsymbol{n}+\ ^{sa}+j_{sa}^{\ }-\ -j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\ -j_s-\ +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\ )!}{(D-\ ^{sa}+s-\ -\boldsymbol{l_i}-\ )!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}-\ \wedge$

$D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}+1 \leq \boldsymbol{l}\ D-\boldsymbol{n}+1$

$2 \leq j_{\ } \leq j_{ik}-j_{sa}^{ik}+\ \wedge j_s+j_{sa}^{ik}-1\ \ \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\ \ ^{sa} \leq \boldsymbol{n}\ \ _{sa}-s$

$\boldsymbol{l_{ik}}\ \ ^{ik}+1 > \boldsymbol{l_s} \wedge\ \ +j_{sa}^{ik}-\ \ _{sa} > \boldsymbol{l_{ik}} \wedge$

$\ \geq \boldsymbol{n} <\ \wedge I=\mathbb{k}>=\ \wedge$

$j_{sa} \leq j_{\ }-1 \wedge j_{\ }\ _{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon\{j_{sa}^{s},\mathbb{k}_1,\ ^{k}\ \mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\} \wedge$

$>3 \wedge\ \ s+\mathbb{k} \wedge$

$\mathbb{k}_z\colon z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

GÜDÜNYA

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{j^{sa}+1)}$$

$$\frac{(n_i}{(j_s-2)!\cdot(n_i-n_{is}}\cdot$$

$$\frac{(n_{is}-n_{i}}{(j_{ik}-}\cdot$$

$$\frac{(n_{i}-n_{sa}-}{(j^{sa}-j_{i}}\cdot$$

$$\frac{(n_{sa}}{(n_{sa}+j_{}}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_{}-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜNYA

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-1)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j^{sa} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\}$

$s > 3 \wedge \boldsymbol{s} = s+1 \wedge$

$\mathbb{k} \cdot z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}\right.$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!}$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \boldsymbol{l} + 1)! \cdot (\boldsymbol{l} - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{j_{ik}=\boldsymbol{l}}^{(j_{ik}-\mathbb{k}+1)}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{\boldsymbol{l_{sa}}+j_{sa}}^{j_{sa}-1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}-D}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n_i-1}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \quad \sum^{(\boldsymbol{l_{sa}}+1)}$$

$$\sum^{(n_i-j_s+1}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}^{(n_i} \sum^{\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$n_{is}+j_s \quad -\mathbb{k}_1 \quad (n_{ik} \quad -\mathbb{k}_2)$$

$$\sum_{n_{ik}} \quad \sum^{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+$$

$$\frac{(n_i - n_{is}$$

$$\frac{(n_{is}$$

$$\frac{(n_{ik}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (\ - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l} - j_{sa})! \cdot (\boldsymbol{n} - j_{sa} - j^{sa} -}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq \leq j^{sa} + j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + \boldsymbol{l} - j_{sa} > \boldsymbol{l_{ik}}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa} - j_{sa} - 1 \wedge j_{sa}^{s} \quad j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s} \{j_{sa}^{s}, \mathbb{k}_1, j_{sa} \quad j_{sa}, j_{sa}, \cdots j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k}$

$\mathbb{k}_z : z = \quad \wedge \mathbb{k} = \mathbb{k}_1 + \quad \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)} \right.$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-s)!}{(D+j^{sa}-\boldsymbol{n}-s)!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{sa}}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-\boldsymbol{n})!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\,(\boldsymbol{n}+j_{sa}-j^{sa})!}+$$

$$\sum_{k}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}\sum_{\boldsymbol{n}-D)}$$

$$\sum_{=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l}_{i}+1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\sum_{(j^{sa}\ldots)}^{(\boldsymbol{l_{sa}}\ldots 1)}$$

$$\sum_{\ldots\boldsymbol{n}+\mathbb{k}}\sum_{(n_i\ldots\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}\ldots+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s\ldots-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}\ldots-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\ldots)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(\ldots_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(\ldots^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \boldsymbol{l} + \quad)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \quad)!}{(D + j^{sa} + s - \boldsymbol{n} - \quad - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j^{ik} \quad \leq j_{ik} \leq \quad + j_{sa}^{ik} - j \quad \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} \quad _{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad > \boldsymbol{l_{ik}} \wedge \boldsymbol{l} \quad j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \quad < n \wedge I = \quad = 0 \wedge$

$j_{sa}^{s} \leq j_{sa}^{i} - 1 \quad _{sa}^{ik} = j_{sa} \quad 1 \wedge j_{sa}^{s} = \quad _{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{ \quad \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa} \quad \cdots, j_{sa}^{i} \} \wedge$

$\quad > 3 \wedge \quad - s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} \quad _2 \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(j_s-\boldsymbol{l}-1)!}{(j_s-\boldsymbol{l}-1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+\boldsymbol{l})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}})!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{}$$

$$\sum_{}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}$$

$$\sum_{}^{}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{\boldsymbol{l}} \sum_{(j_s = j_{ik} - \boldsymbol{l} + 1)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})}
$$

$$
\sum_{j_{ik} = \boldsymbol{l_s} + j_{sa}^{ik} - D - 1}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - D)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}
$$

$$
\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_{sa} - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-}$$

$$\frac{(n_{\cdot}-n_{is}-1)!}{(j_s-2)!\cdot(n_{i}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}+n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}$ $_{a}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{$ $= \boldsymbol{l_{ik}} \wedge \boldsymbol{l_{i}}$ $j_{sa}-s =$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge$ $_{a}^{s}=j_{sa}^{ik}-1$

$\boldsymbol{s}$: $\left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \ldots \cdots, j_{sa}^{i}\right\} \wedge$

s $3 \wedge \boldsymbol{s} =$ $\mathbb{k} \wedge$

$\mathbb{k}_z$ $= 2 \wedge \mathbb{k} = \mathbb{k}$ $+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - 1)! \cdot (\boldsymbol{n} - n_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 1)!}{(j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (\boldsymbol{l} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-$$

$$\frac{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}{}-$$

$$\sum_{j_{ik}=}^{(\ )}\sum_{j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=^{a}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\boldsymbol{n}\ldots\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\le j_s\le j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{\boldsymbol{l}=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{n}-D)} \sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{D-j_{sa}(j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{n} \sum_{n_i} \sum_{\mathbb{k}(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)} \sum_{n_{is}+j_{ik}-\mathbb{k}_1 (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{ik}=} \sum_{2-j_{ik}+1 (n_{sa}=\boldsymbol{n}-j^{sa}+1)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-}$$

$$\frac{(n_i - n_{i}$$

$$\frac{(n_{is}$$

$$\frac{(n_{ik}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}$ [illegible] $-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j$ [illegible] $= \boldsymbol{l_{ik}} \wedge \boldsymbol{l}$ [illegible] $j_{sa}-s =$ [illegible] $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0$ [illegible]

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1$ [illegible] $= j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \cdots, j_{sa}^{i}\} \wedge$

s [illegible] $3 \wedge \boldsymbol{s} =$ [illegible] $\mathbb{k} \wedge$

$\mathbb{k}_z$ [illegible] $= 2 \wedge \mathbb{k} = \mathbb{k}$ [illegible] $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GULDUNYA

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(\boldsymbol{n}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-1)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\boldsymbol{n} > \boldsymbol{n}-\boldsymbol{l} \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \le j_s \le j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \le j_{ik} \le j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{\boldsymbol{k}=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{n}+\boldsymbol{n}-D)}^{(\boldsymbol{l}_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{\boldsymbol{l}_{ik}=\boldsymbol{l}_{ik}+\boldsymbol{n}-D}^{\boldsymbol{l}_s-j_{sa}^{ik}-\boldsymbol{l}} \sum_{(\boldsymbol{l}_{sa}=\boldsymbol{l}_{sa}+\boldsymbol{n}-D)}^{(\boldsymbol{l}_{sa}-j_{sa}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}-j_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+1)}^{(n_{is}+1)}$$

$$\sum_{n_{ik}=\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(\boldsymbol{n} - n_{is} - 1)!}{(\boldsymbol{n} - 2)! \cdot (\boldsymbol{n} - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_{sa}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right.\ -\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-\ j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}\ \boldsymbol{l}-1)!}{\boldsymbol{l_s}-\boldsymbol{l}+\ !\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\ )!}{(D+j^{sa}+s-\boldsymbol{n}\ -j_{sa})!\ (\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j^{ik}\ \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j\ \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}\ j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}\ > \boldsymbol{l_{ik}} \wedge \boldsymbol{l}\ j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \ < n \wedge I=\ =0 \wedge$

$j_s \leq j_{sa}^{i}-1\ ^{ik}=j_{sa}\ 1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{\ \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}\ \cdots, j_{sa}^{i}\} \wedge$

$\ >3 \wedge\ \leq s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}\ \ _2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-\boldsymbol{n}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(-j^{sa})!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{-j_s-1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)!}{+\boldsymbol{l_{ik}}-\boldsymbol{s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \quad (\boldsymbol{n} - j^{sa})!}$$

$$\frac{(\quad \boldsymbol{l} - 1)}{(\boldsymbol{l_s} \quad - \boldsymbol{l} + 1) \quad - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{s} + 1)!}{(j_s + \boldsymbol{l_{ik}} - \quad)! \cdot (j_{ik} \quad - j_{sa}^{ik} + 1)!}$$

$$\frac{\quad + j_{sa}^{ik} \quad \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{s} \quad \boldsymbol{l_{ik}})! \cdot (\quad + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{s} - \boldsymbol{l_{sa}} - s)!}{(D + \quad - \boldsymbol{n} - \boldsymbol{l_{sa}}) \quad (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = \boldsymbol{l_{sa}} + \boldsymbol{n} - D - j_{sa} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(\quad)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j_{sa}} = \sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=} \sum_{+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j^{sa}=\boldsymbol{l_i}+}\sum_{}^{j_{sa}-D-s)}$$

$$\sum_{}^{n}\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i}\sum_{}^{(n_{is}=\boldsymbol{n}+}\sum_{}^{+1)}$$

$$\sum_{n_{is}=n_{is}+j_s}^{(\ )}\sum_{-\mathbb{k}_1}^{(n_{sa}}\sum_{}^{j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+j_{sa}^{ik}-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 0 - \boldsymbol{n} + 1 \wedge$

$2 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j^{sa} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} - j_{sa} + j_{sa}^{ik} \leq j_{ik} \leq \boldsymbol{n} + j_{sa}^{ik} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} - j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge \mathbb{k} > 0 \wedge$

$j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

GÜLDÜNYA

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa} - D - 1)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - [illegible]} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - [illegible]^{a} - s)!}$$

$$\sum_{[illegible]k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa} [illegible])}$$

$$\sum_{[illegible]=j^{sa}+j_{sa}[illegible]_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+[illegible]+j_{sa}-\boldsymbol{l})} [illegible]_{(j^{sa}=\boldsymbol{l_i}+[illegible]-D-s)}$$

$$\sum_{[illegible]n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{[illegible]_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{([illegible] + j^{sa} [illegible] j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - [illegible] - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D > \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{i[illegible]} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} [illegible] - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + \ldots)}^{(\ )}
$$

$$
\sum_{j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}}^{\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l} - j_{sa} + 1} \sum_{(\ldots + j_{sa} - j_{sa}^{ik})}^{(\ )}
$$

$$
\sum_{\ldots = \boldsymbol{n} + \mathbb{k}} \sum_{(\ldots = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + \ldots)}
$$

$$
\sum_{n_{i\ldots} + \mathbb{k}_2 - j_{ik}}^{n_{is} + \ldots - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{i\ldots} - \ldots - \mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \ldots)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(\ldots_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\ldots_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}
$$

$$
\sum_{j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l} - j_{sa} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (\ - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l} - j_{sa})! \cdot (\boldsymbol{n} - j_{sa} - j^{sa} -}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_{ik}} - j_{sa} - s > 0 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 3 \wedge \boldsymbol{s} = \mathbb{k}_1 + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GULDUNYA

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

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$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{sa} = \sum_{\boldsymbol{l}} \sum_{(j_s \ldots - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_s} + \boldsymbol{n} \ldots - D - 1}^{\boldsymbol{l_s} + j_{sa}^{ik} - \ldots} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{}}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\ \ \mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(\ \ =n_{ik}+j_{ik}-j^{sa}-\ }$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{\ \ }-\mathbb{k}_{\ \ }-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_{\ \ })!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-\ \ -j_{sa}\right)!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{-j_s-\ \ +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\ \ )!}{(D+\ \ +s-\ \ -\boldsymbol{l_i}-\ \ )!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+\ \ \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq \ \ ^{a}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{s\ \ }+\boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\ \ \wedge \boldsymbol{l_{sa}}+\ \ -j_{sa} \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \ \ \leq n \wedge I=\mathbb{k}\ \ 0 \wedge$

$j_{sa} \leq j_{sa}^{i}\ \ 1 \wedge j_{sa}^{ik}=j_{s\ \ }-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j^{s\ \ }, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{\ \ }, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s}=\ \ +\mathbb{k} \wedge$

$z=\ \ \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \ \sum_{(n_{sa}=}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \ \sum_{j^{sa}+1)}$$

$$\frac{(n_i \qquad -1)}{(j_s-2)! \cdot (n_i-n_{is} \qquad +1)!} \cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s \qquad (n_{is}+j_s \qquad -n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik} \qquad -n_{sa}-1)}{(j^{sa}-j_{ik} \qquad -1)! \cdot (\qquad +j_{ik}-n_{sa}-j^{sa})!} \cdot$$

$$\frac{(n_{sa} \qquad -1)!}{(n_{sa}+j_{sa} \qquad -\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)! \cdot (j_s-2)!} \cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+ \qquad -\boldsymbol{n}-\boldsymbol{l_{sa}})! \cdot (\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)! \cdot \left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s>3 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-$$

$$(\boldsymbol{l_{ik}}$$

$$\sum_{k=1}$$

$$\sum_{j_s=j_s+j_{sa}^{ik}-1}$$

$$\sum_{}$$

$$\sum_{}$$

$$\sum_{}$$

$$\sum_{}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(\quad-\boldsymbol{n}-\mathbb{k}_1-\quad)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(\quad+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\geq \boldsymbol{n} < \quad \wedge \boldsymbol{l_s} > D - \quad + 1 \wedge$

$2 \leq j_{\quad} \leq j_{ik} - j_{\quad}^{ik} + \quad \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{j_{ik}+1}^{n_{is}+j_s-j_{ik}} \sum_{(n_{ik}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa})}
$$

$$
\frac{(n_i - n_{is}}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{sa}-n_{sa}-1)!}{a-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = D - \boldsymbol{n} = 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{s}, \cdots, j_{sa}^{i}\} \wedge$

$n > 3 \wedge \boldsymbol{n} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(j_s-\boldsymbol{l}-1)!}{(j_s-\boldsymbol{l}-1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+\boldsymbol{l})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}})!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{}$$

$$\sum_{j_{ik}-j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$$

$$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{s}_{j_{ik}, j^{sa}} = \sum_{k=l} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{i} - D - j_{sa} - 1} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{\boldsymbol{l_{ik}}=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}-j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j_{ik}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{n_i-\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}-j_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{ik}}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{is}=n_{ik}+j_{ik}-j^{sa}-}^{(\ )}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}+j_{sa}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l})!}{(D+j^{sa}+s-\boldsymbol{l_s}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \quad \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \quad \sum_{(\boldsymbol{n}+\mathbb{k}}^{(j_s+1)}
$$

$$
\sum_{}^{n_{is}+j_s-j_{ik}} \quad \sum_{(n_{ik}+j_{ik}-j^{sa}}^{(\ )}
$$

$$
\sum_{}^{+1} \quad \sum_{(\boldsymbol{n}-j^{sa}+1)}^{}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{- n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \quad \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}+j_{ik}-j^{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(j_s-\boldsymbol{l}-1)!}{(j_s-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge$ [illegible] $- 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j$ [illegible] $\wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z$ [illegible] $2 \wedge \mathbb{k} = \mathbb{k}_1$ [illegible] $\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} + \boldsymbol{n} - D - j_{sa})} \sum_{(j_s = \boldsymbol{l_{ik}} + \boldsymbol{n} - D - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}^{ik})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{l_{sa}})! \cdot (D + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 2)} \sum_{(j_s = \boldsymbol{l_{sa}} + \boldsymbol{n} - D - j_{sa} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{\boldsymbol{l_i}=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-s+1)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+2)}$$

$$\sum_{j_s+j_{sa}^{ik}-1} \sum_{(j_{ik}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ )}$$

$$\sum_{n_{is}=n_{is}+j_s-j_{sa}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$j_{ik} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

GÜLDÜNYA

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \Big) \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$$

$$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$
{}_{fz}S_{j_s, j_{ik}, \dots} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} + \dots D - j_{sa})} \sum_{(j_s = \boldsymbol{l_s} + \dots)}
$$

$$
\sum_{j_{\dots} = j_s + j_{sa}^{ik} - 1}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{\dots \boldsymbol{n} - D)}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}
$$

$$
\sum_{n_{is} + j_{\dots} - \mathbb{k}_1}^{\dots_{ik} - \mathbb{k}_1} \sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}
$$

$$
\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}
$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+j_{ik}-n_{ik}-\mathbb{k}_2)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} + n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜNYA

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-1)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\boldsymbol{l_i}=0\wedge$

$j_s\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa}^{s}\cdots,j_{sa}^{i}\}\wedge$

$>3\wedge=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}_2\Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\ \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}$$

GULDUNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(j_s - \boldsymbol{l} - 1)!}{(j_s - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_{ik} + \boldsymbol{l_{ik}} - j_s - j_{sa}^{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}+1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}})!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}-j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

GÜLDÜNYA

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{2}, \ldots, j_{ik}, j^{sa} \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = \boldsymbol{l_s} + \boldsymbol{n} - D)}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_s}\ \ \ \

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{}^{}{}_{(j_s}$$

$$\sum_{}^{\boldsymbol{l_{ik}}-\boldsymbol{l}}\sum_{}^{}{}_{+j_{sa}^{ik}-\boldsymbol{l}+1\ (}$$

$$\sum_{}^{(}{}_{j_s+1)}$$

$$\sum_{}^{}{}_{+\mathbb{k}\ (n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$n_{is}$$

$$\sum_{}^{}{}_{n_{ik}=\boldsymbol{n}}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{ik}+j_{ik}-j^{sa}-$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j \quad - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{sa} + j_{sa}^{ik} \quad - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l} - \boldsymbol{l} - 1)!}{(j_s - \quad + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \quad)!}{(D + \quad + s - \quad - \boldsymbol{l_i} - \quad)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n}$ $+ 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq$ $^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} -$ $^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 >$ $\wedge \boldsymbol{l_{sa}} + j$ $- j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq$ $< n \wedge \boldsymbol{l_s} > D$ $\boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j$ $- j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} +$ $- j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} +$ $> \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}\big) \wedge$

D $< n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

GULDUNYA

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{\boldsymbol{n}+}^{(\ \ j_s+1)}
$$

$$
\sum^{n_{is}+j_s-j_{ik}} \sum^{(n_{ik}+j_{ik}-j^{sa})}
$$

$$
\sum_{+1}^{} \sum_{\boldsymbol{n}-j^{sa}+1)}^{}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{s - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n - n_{sa} - 1)!}{(a - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}
$$

GÜLDÜMYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(j_s-\boldsymbol{l}-1)!}{(j_s-\boldsymbol{l}-1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)!}{(\boldsymbol{l_{ik}}+\boldsymbol{l_{ik}}-j_{sa}^{ik})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge$ $-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j$ $\wedge$

$s > 3 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z$ $2 \wedge \mathbb{k} = \mathbb{k}_1$ $\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!}$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \boldsymbol{l} + 1)! \cdot (\boldsymbol{l} - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa} + 1)!}{(j_s + \boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!}$$

$$\frac{(j_{sa} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right.}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\right.-j_{sa})!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot+j_{sa}-j^{}-)!}-$$

$$\sum_{k}\sum_{j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$(\quad<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$2\le j_s\le j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$$

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$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s,\ldots,j_{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+\boldsymbol{n}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=$$

$$\sum_{j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}}\ \sum_{(\boldsymbol{l_{sa}}$$

$$\sum_{n_i$$

$$n_{is}+$$

$$\sum_{n_{ik}=\boldsymbol{n}-$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum^{(\ )} \left(j^{sa} = j_{sa} - j_{sa}^{ik}\right)$$

$$\sum^{n} \sum^{(n_i + 1)}$$

$$\sum_{\boldsymbol{n} + \mathbb{k}}^{} \left(n_{is} = \boldsymbol{n} + \mathbb{k}\right)$$

$$\sum^{(\ )}$$

$$\sum_{} \left(n_{is} = n_{is} + j_s - \mathbb{k}_1\right)$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - s - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} + j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + j_{sa}^{ik} - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

GULDUNYA

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{l}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_i=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s)}
$$

$$
\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{sa}+j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{i}}{(j_s - 2)! \cdot (}$$

$$\frac{(n_{is}}{(j_{ik} - j_s}$$

$$\frac{(n_{ik}}{(j^{sa}}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{ik} \geq \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D+j_{sa}-\boldsymbol{n} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{s}-j_{sa}-1 \wedge j_{sa}^{s}-j_{sa}^{ik}-$

$\boldsymbol{s} \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{s}-j_{sa}, j_{sa}, \cdots j_{sa}\} \wedge$

$s > 2 \wedge \boldsymbol{s}=s+\mathbb{k}$

$\mathbb{k}_z: z= \wedge \mathbb{k}=\mathbb{k}_1+ \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 1)!}{(\boldsymbol{l_s} - j_s + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - 1)! \cdot (j^{sa} - j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-_{k}-j_{sa}\right)!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}$$

$$\frac{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!}{(\boldsymbol{n}+j_{sa}-j$$

$$-\sum_{}^{(\ )}\sum_{j_{sa}^{ik}+1)}$$

$$\sum_{j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{(j^{sa}=j_{sa}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$$

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$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} \ldots +1)}^{\ldots)}
$$

$$
\sum_{\ldots = j_{sa}^{ik}+1}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j \ldots - j_{sa}^{ik})}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}
$$

$$
\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j \ldots_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{ik}+j_{ik}-j^{sa}-1}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-j \quad -\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{sa}+j_{sa}^{ik} \quad -j_{sa})!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\quad)!}{(D+\quad+s-\quad-\boldsymbol{l_i}-\quad)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq \quad -\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq \quad a+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-\quad ^{ik} \leq j^{sa} \quad \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1= \quad \wedge \boldsymbol{l_{sa}}+j \quad -j_s \quad \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq \quad +j_{sa}-\boldsymbol{n} \wedge \quad \leq D+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < \quad I=\mathbb{k}>= \quad \wedge$

$j_{sa} \leq \quad -1 \wedge j_{sa} \quad j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j \quad \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$\quad =s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{j^{sa}+1)}$$

$$\frac{(n_i \quad -1)}{(j_s-2)\cdot(n_i-n_{is} \quad +1)!}\cdot$$

$$\frac{(n_{is}-n_{ik} \quad -1)!}{(j_{ik}-j_s \quad)\cdot(n_{is}+j_s \quad -n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik} \quad -n_{sa}-1)}{(j^{sa}-j_{ik} \quad -1)!\cdot(\quad +j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa} \quad -1)!}{(n_{sa}+j_{sa} \quad -\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\quad +\boldsymbol{l} \quad -j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ \ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

GÜLDÜNYA

$$\frac{(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = {}_{a}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$fzS_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )} \right.$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)$$

$$\left(\sum_{k=\boldsymbol{l}}^{(}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}$$

$$\sum_{j_{ik}=j_s-1}^{j_{sa}-1}\left(l_{ik}\right._{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)$$

$$\sum_{(j^{sa}=j_{sa}+2)}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{j_{ik}-\mathbb{k}_1}^{}\ \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{+j_{ik}-}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot$$

$$\frac{(n_{is} \quad n_{ik} - 1)!}{(j_{ik} - j_s \quad 1)! \cdot (n_{is} \quad j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} \quad j_{ik} - 1)! \quad n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=j_{sa}+1)}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}_{\boldsymbol{s}}-j_{sa})!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} -$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - \ \geq \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge \ = j_{sa}^{ik} - 1$

$\boldsymbol{s}: \left\{j_{s}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \ldots, j_{sa}^{i}\right\} \wedge$

$s \ldots 3 \wedge \boldsymbol{s} = \ldots \mathbb{k} \wedge$

$\mathbb{k}_z \ldots = 2 \wedge \mathbb{k} = \mathbb{k}_1 \ldots \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\ \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+1)}^{(n_i-j_s+1)}\ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\right.$$

GULDUMYA

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(+j_{sa}-s)!}{(+j^{sa}-\boldsymbol{n}-)!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}\right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\ \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{\boldsymbol{l}}^{(\quad)}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+}$$

$$\sum_{j_{ik}}^{ik}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\quad-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

GÜLDÜNYA

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}}\sum_{=j_{sa}+1)}$$

$$\sum_{}^{(n_i}\sum_{\boldsymbol{n}+\mathbb{k}\ (n_{is}=\boldsymbol{n}+\mathbb{k}}$$

$$\sum_{=n_{is}+j_s}^{(\ )}\sum_{-\mathbb{k}_1\ (n_{sa}}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-s-\quad-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_2)!\cdot(\boldsymbol{n}^{j^{sa}}+j_{sa}^{}-j_{ik}-s-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}\quad j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+\quad\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq \quad<n\wedge \boldsymbol{l}\neq \quad\wedge \boldsymbol{l_{sa}}\leq D+j_{sa}\quad \boldsymbol{n}\wedge$

$1\quad j_s\leq j_{ik}\quad{}_{sa}^{ik}+1\wedge \quad+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}\quad j_{sa}-j_{sa}^{ik}\leq j\quad\leq \boldsymbol{n}+j_{sa}\quad\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}\quad 1=\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}\quad j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D\geq \boldsymbol{n}<n\wedge\quad\mathbb{k}>0\wedge$

$j_{sa}\quad j_{sa}^{i}\quad 1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1\quad{}_{sa},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s>3\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}\right.$$

GÜLDÜNYA

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is}}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s + 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!}$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}\right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

GÜLDÜNYA

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\quad+j_{sa}^{ik}-\quad-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-\quad)!}{(D+j^{sa}-\boldsymbol{n}-\quad+j_{sa}-\quad-s)!}\Bigg)$$

$$\sum_{\quad}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\quad-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

GÜLDÜNYA

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{\left(\ \right)} \sum_{(j_s = j_{ik} \ldots +1)}^{\left(\ \right)} \right.
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j \ldots -j_{sa}^{ik})}^{(\ )}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j \ldots_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

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$$\left(\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}\right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{j_{ik}-}$$

$$\frac{(n_{\cdot}-n_{is}-1)!}{(j_s-2)!\cdot(n_i-\quad j_s+1)!}\cdot$$

$$\frac{(n_{is}-\quad-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-\quad j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-\quad-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (\ - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l} - j_{sa})! \cdot (\boldsymbol{n} - j_{sa} - j^{sa} -}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} -$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - \ _{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - \ > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge \ _{s} = j_{sa}^{ik} - 1$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \ldots, j_{sa}^{i}\right\} \wedge$

$s \ldots 3 \wedge \boldsymbol{s} = \ldots \mathbb{k} \wedge$

$\mathbb{k}_z \ldots = 2 \wedge \mathbb{k} = \mathbb{k}_1 \ldots \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 2)} \sum_{(j_s=2)} \right.$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GULDUMYA

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(+j_{sa}-s)!}{(+j^{sa}-\boldsymbol{n}-)!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}\ \sum_{(j_s=2)}\right.$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)$$

$$\sum_{j_{ik}=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}\sum_{(j_s=2)}^{(\ )}$$

$$\sum_{j_{ik}=j_s-j_{sa}^{ik}-1}^{(\ )}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n_i}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_i=\boldsymbol{n}+\mathbb{k}-j_s+1)}
$$

$$
\sum_{n_{is}+j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{is}+j_{ik}-j_{sa}-\mathbb{k}_2)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(j_s - \boldsymbol{l} - 1)!}{(j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} - \boldsymbol{l_{sa}} - j_{sa} - \boldsymbol{l})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{k}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2$

$$fzS_{j_s,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}\right.$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\boldsymbol{l}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)$$

$$\Bigg(\sum_{\boldsymbol{l}=\boldsymbol{l}}^{\boldsymbol{l_s}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+1}^{j_{sa}-1}\sum_{(j^{sa}=\boldsymbol{l_{sa}}-\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n_i}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{ik}+j_{ik}-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+j_{ik}-n_{ik}-\mathbb{k}_2)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (\ - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l} - j_{sa})! \cdot (\boldsymbol{n} - j_{sa} - j^{sa} -}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} + 1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq \ \leq j^{sa} + j_{sa}^{ik} \ \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + \ - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + \ - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \ >= 0 \wedge$

$j_s \leq j_{sa}^{i} - 1 \ _{sa}^{ik} = j_{sa} \ 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{ \ , \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa} \cdots, j_{sa}^{i} \}$

$> 3 \wedge \ = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} \ \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(j_s-\boldsymbol{l}-1)!}{(j_s-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{k} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )} \right.$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{(}\sum_{(j_s=j_{ik}-j_{sa}^{ik}}$$

$$\sum_{j_{ik}-j_{sa}-1}^{ik}\sum_{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{j_{ik}=}^{ik}{}_{a}+1\quad(j^{sa}-{}_{sa}+\boldsymbol{n}-D)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{}^{j_{ik}-\mathbb{k}_1}\quad\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{}\quad\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - \quad j_s + 1)!} \cdot$$

$$\frac{(n_{is} \quad n_{ik} - 1)!}{(j_{ik} - j_s \quad 1)! \cdot (n_{is} \quad j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} \quad _{ik} - 1)! \quad n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq \cdots \leq j^{sa}+j_{sa}^{ik} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+\cdots-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+\cdots-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\cdots>=0 \wedge$

$j_s \leq j_{sa}^{i}-1 \cdots j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{\cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{s}, \cdots, j_{sa}^{i}\}$

$s > 3 \wedge \cdots = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}_z=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (n_{sa} - j^{sa})!} \cdot$$

$$\frac{(j_s - \boldsymbol{l} - 1)!}{(j_s - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{k}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2$

$$fzS_{j_s,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}\right.$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)$$

$$\left(\sum_{k=\boldsymbol{l}}^{(}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}}\right.$$

$$\sum_{j_{ik}=\boldsymbol{n}+j_{sa}^{ik}-}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{j_{ik}-\mathbb{k}_1}^{}\ \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \quad \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\ \mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{j_{ik}-}$$

$$\frac{(n_{\cdot}-n_{is}-1)!}{(j_s-2)!\cdot(n_i \quad j_s+1)!}\cdot$$

$$\frac{(n_{is} \quad _{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is} \quad j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik} \quad n_{sa}-1)!}{(j^{sa} \quad _{ik}-1)! \quad n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq \cdots \leq j^{sa}+j_{sa}^{ik}-\cdots_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-\cdots \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+\cdots-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+\cdots-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\cdots>=0 \wedge$

$j_{sa}^{i} \leq j_{sa}^{i}-\cdots j_{sa}^{ik}=j_{sa}^{s}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{i} \cdots, j_{sa}^{i}\}$

$s > 3 \wedge \cdots = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \cdots \mathbb{k}_1+\cdots_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{(\ \ )}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\right.$$

GULDUNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-\boldsymbol{n}-1)!}{(n_{sa}+j_{sa}-\boldsymbol{n}-1)!\cdot(j_{sa}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{n}-\boldsymbol{l}-1)!}{(\boldsymbol{n}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(\quad j^{sa}-\boldsymbol{l}\quad)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}\right.$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-[illegible]}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-[illegible]-j_{sa}\right)!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}[illegible])!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})![illegible](\boldsymbol{n}+j_{sa}-[illegible]s)!}+$$

$$\sum_{[illegible]}\sum_{[illegible]j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}[illegible]^{ik}_{sa}+1}^{[illegible]+\boldsymbol{n}+j_{sa}^{ik}-[illegible]j_{sa}-1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\sum_{(j^{sa}=j_{ik}-j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{n_i}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-\boldsymbol{n}-1)}^{(n_i-\boldsymbol{n}+1)}$$

$$\sum_{n_{is}=n_{is}+j_s-j_{sa}-\mathbb{k}_1}^{n_i}\sum_{(n_{sa}-\mathbb{k}_1)}^{(\ )}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-\boldsymbol{n}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq \boldsymbol{n}<n\wedge \boldsymbol{l}\neq \boldsymbol{l_i}\wedge \boldsymbol{l_s}\leq D-\boldsymbol{n}+\boldsymbol{l}\wedge$

$2\leq \boldsymbol{l}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}\wedge$

$1\leq \boldsymbol{l_s}\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{l_{ik}}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\leq \boldsymbol{l_{ik}}\wedge \boldsymbol{l_{ik}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1\wedge$

$D\geq \boldsymbol{n}<\boldsymbol{l}\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s>3\wedge \boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z: z=2\wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\quad)} \sum_{(j^{sa}=j_{ik}+j_{sa}-}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(\quad-\mathbb{k}_2)}
$$

$$
\frac{(n_{is} - 1)!}{(j_s)! \cdot (n_i + 1)!} \cdot
$$

$$
\frac{(n_{is} - 1)!}{(j_{ik} - j_s)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} n_{sa} - 1)!}{(j^{sa} - 1)! (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{n}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{n})!\cdot(j^{sa}-j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}\ \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - \quad)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - \quad - j_{sa}\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - \quad}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot \quad + j_{sa} - j^{\quad})!}\Big) -$$

$$\sum_{k=\quad}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 2)} \sum_{\quad}^{(D - s + 1)}$$

$$\sum_{j_{ik}=\quad - j_{sa}^{ik} - 1}^{(\quad)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(\quad_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(\quad - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\boldsymbol{\quad} n \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}} \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} + 1 \leq \boldsymbol{l} \leq \quad_{\boldsymbol{i}} \boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}} \sum_{\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l}_s - \boldsymbol{l} + 2)}$$

$$\sum_{j_{ik}=j_s}^{j_{sa}^{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 2)} \sum_{(j_s = \boldsymbol{l_i} + \boldsymbol{n} - D - s + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(\ )} \left(j^{sa} = j \quad j_{sa} - j_{sa}^{ik}\right)$$

$$\sum_{\boldsymbol{n} + \mathbb{k}}^{n} \left(n_{is} = \boldsymbol{n} + \quad (n_i \quad + 1)\right)$$

$$\sum_{n_{is} = n_{is} + j_s \quad - \mathbb{k}_1}^{(\ )} \left(n_{sa} \quad \quad j^{sa} - \mathbb{k}_2\right)$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} \quad _k - s \quad - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} \quad _1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} \quad j^{sa} + j_{sa} \quad j_{ik} - s - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} \quad j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + j \quad - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} \quad \wedge$

$2 \quad \boldsymbol{l} \leq D + \quad + j_{sa} - \quad - \boldsymbol{l_{sa}} \wedge$

$1 \leq j \quad \leq j_{ik} - j_{sa}^{ik} \quad 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad j_{sa}^{ik} \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \quad \boldsymbol{l} \wedge \boldsymbol{l} \quad + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \quad j_{sa} \quad < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < \quad \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 1)!}{(j_s - 2)!} \cdot$$

$$\frac{(j_{sa}^{ik} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - j_{sa})! \cdot (j^{sa} - j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-_{k}-j_{sa}\right)!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-$$

$$\frac{}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(+j_{sa}-j^{}!}\Big)-$$

$$\sum_{k=}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{\boldsymbol{l}}^{(D-s+1)}$$

$$\sum_{j_{ik}=+j_{sa}^{ik}-1}^{(\ )}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$$

GÜLDÜMYA

$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, j_{sa}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{sa}+j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l})}^{(j_{sa}+j_{sa}^{ik}+1)} \sum_{j_{sa}=j^{sa}+j_{sa}}^{(j_{sa}+j_{sa}^{ik}+1)} \sum_{(j_{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot $$

$$ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot $$

$$ \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} + $$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+\mathbb{k}_2)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+\mathbb{k}_2)}^{n_{ik}+j_{ik}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜNYA

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^{s} = j_{sa}^{i} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\}$

$s > 3 \wedge \boldsymbol{s} = s +$

$\mathbb{k}_z = 2 \wedge$ $= \mathbb{k}_1 +$ $\Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

GULDUNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{sa}^{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - j_{sa} - \boldsymbol{l_{sa}})! \cdot (j_{sa} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}-j_{sa}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{\boldsymbol{l_{ik}}=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+\boldsymbol{l_{ik}}-\boldsymbol{l}} \sum_{(j_s = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(\ )}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{sa}-\mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge j_s \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$j_{sa} - j_{sa}^{ik} - 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

GÜLDÜNYA

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(\boldsymbol{l_s}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_i=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s)}
$$

$$
\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{is}+j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{is}+j_{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

GÜLDÜNYA

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} \quad - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} \quad j_{sa}^{ik} - j_{ik} \quad j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} \quad \boldsymbol{l} - 1)!}{\boldsymbol{l_s} \quad \boldsymbol{l} + \quad ! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \quad)!}{(D + j^{sa} + s - \boldsymbol{n} \quad - j_{sa})! \quad (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} -$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + \quad j_{ik} \leq \quad + j_{sa}^{ik} - \quad \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} \quad _{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - \quad = \boldsymbol{l_{ik}} \wedge$

$D \geq \quad < n \wedge I = \mathbb{k} \quad = 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \quad _{sa}^{ik} = j_{sa} \quad 1 \wedge j_{sa}^{s} = \quad _{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{ \quad \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa} \quad , j_{sa}^{i} \} \wedge$

$\quad > 3 \wedge \quad s + \mathbb{k} \wedge$

$\mathbb{k}_z: z \quad 2 \wedge \mathbb{k} \quad \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \right.$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=j_{sa}+1)}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-\boldsymbol{n}-1)!}{(n_{sa}+j_{sa}-\boldsymbol{n}-1)!\cdot(j^{sa}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l}_{\boldsymbol{s}}-s)!}{(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}\right.$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l}_{\boldsymbol{s}}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-1)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j_{sa}-s)!}+$$

$$\sum_{\boldsymbol{l_s}=\boldsymbol{l}}\sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_{sa}}\sum_{j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

GÜLDÜNYA

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}}\sum_{=j_{sa}+1)}$$

$$\sum_{}^{n}\sum_{}^{(n_i}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}$$

$$\sum_{=n_{is}+j_s}^{(\ )}\sum_{-\mathbb{k}_1}^{(n_{sa}}\sum_{;sa}\sum_{-\mathbb{k}_2)}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-s-\quad-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_2)!\cdot(\boldsymbol{n}^{isa}+j_{sa}^{ik}-j_{ik}-s-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq \boldsymbol{n}<n\wedge \boldsymbol{l}\neq \wedge \boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j^{sa}+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}-j_{sa}\leq j^{sa}-j_{sa}^{ik}\leq \boldsymbol{n}+j_{sa}-\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}-1>\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$D\geq \boldsymbol{n}<n\wedge \mathbb{k}>0\wedge$

$j_{sa}\geq j_{sa}^{i}+1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,\ a,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s>3\wedge \boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}\right.$$

GÜLDÜNYA

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j^{sa}+1)}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is}}$$

$$\frac{(n_{is} - n_{ik}}{(j_{ik} - j_s}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + \quad - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)}\right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \boldsymbol{l} + 1)! \cdot (\boldsymbol{l} - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{l} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{l} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l} + 1}^{\boldsymbol{l_{sa}} - j_{sa} - \boldsymbol{l} - j_{sa} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \Big)$$

$$\sum_{\boldsymbol{l_s} = \boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_s} + j_{sa} - \boldsymbol{l}} \sum_{(j_{ik} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i = \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(\ )}$$

$$\sum_{n_{ik} = j_{sa} + j_s - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i + \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$1 \leq j_{sa} \leq j_{ik} - j_{sa} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$j_{sa} + j_{sa}^{ik} - 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

GÜLDÜNYA

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}
$$

$$
\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-\boldsymbol{n}+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\boldsymbol{n}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-n_{is}-j_s+1)!} \cdot
$$

$$
\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)! \cdot (j_s-2)!} \cdot
$$

$$
\left. \frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})! \cdot (\boldsymbol{n}+j_{sa}-j^{sa}-s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(j_s - \boldsymbol{l} - 1)!}{(j_s - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_{ik} + \boldsymbol{l_{ik}} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{k}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2$

$$fzS_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \right.$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\left.\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot\right)$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{}-s)!}\Bigg)$$

$$\left(\sum_{k=\boldsymbol{l}}^{(}\sum_{(j_s=}^{(j_{sa}-j_{sa}^{ik})}\right.$$

$$\sum_{j_{ik}=j^{s}}^{(+j_{sa}-\boldsymbol{l})}\sum_{-j_{sa}\ (j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+1)}^{(n_{is}+1)}$$

$$\sum_{n_{ik}=\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(j^{sa}=\boldsymbol{l_i}+j_{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1)}$$

$$\frac{(\boldsymbol{n}-n_{is}-1)!}{(j_s-2)!\cdot(\boldsymbol{n}-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_s-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - j}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} + 1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j \leq j^{sa} + j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + \boldsymbol{l} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = 0 \wedge$

$j_s \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{s}, \cdots, j_{sa}^{i}\}$

$z > 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

GULDUNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}+j_{sa}-\boldsymbol{n}-1)!}{(n_{sa}+j_{sa}-\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(j_s-\boldsymbol{l}-1)!}{(j_s-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)!}{(j_{ik}+\boldsymbol{l_{ik}}-j_s-j_{sa}^{ik}+1)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )} \right.$$

$$\sum_{j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\ldots}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-\ldots-s)!}\Bigg)$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{\ldots}\sum_{(j_s=\ldots}^{(\ldots-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=\ldots+\boldsymbol{n}+j_{sa}^{ik}-\ldots}^{\ldots}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ldots)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{\ldots-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

GÜLDÜNYA

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{sa}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i \quad +1)} +1)$$

$$\sum_{n_{ik}=}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{ik}=}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} {}^{j^{sa}+1)}$$

$$\frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{ik} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-j}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq \ \leq j^{sa}+j_{sa}^{ik}\ \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+\ -j_{sa}=\boldsymbol{l_{ik}}\ \wedge$

$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l_s}+\ -\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\ \ =0 \wedge$

$j_s \leq j_{sa}^{i}-1\ \ =j_{sa}^{ik}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{\ \ , \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_s \cdots, j_{sa}^{i}\}$

$\ > 3 \wedge \ = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}\ \ \mathbb{k}\ +\ _2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (n_{sa} - j^{sa})!} \cdot$$

$$\frac{(j_s - \boldsymbol{l} - 1)!}{(j_s - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_{ik} + \boldsymbol{l_{ik}} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2$

$$S_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}\right.$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\left.\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot\right)$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)$$

$$\left(\sum_{k=}\sum^{(\boldsymbol{l_s}-\boldsymbol{l}+}_{=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}}\right.$$

$$\sum^{j_{sa}+1}\qquad\sum^{(\quad)}$$

$$j_{ik}=j_s-$$

$$(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\ \sum^{(n_i-j_s+1)}_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum^{j_{ik}-\mathbb{k}_1}\quad\sum^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}\quad\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{i}}{(j_s - 2)! \cdot (}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s + 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \overset{(\ )}{\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} =$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} =$ $+ \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \overset{(\ )}{\sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}} \right.$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \overset{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})}{\sum_{(j^{sa} = \boldsymbol{l_{ik}} + \boldsymbol{n} + j_{sa} - D - j_{sa}^{ik})}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \overset{(n_i - j_s + 1)}{\sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}}$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(+j_{sa}-s)!}{(+j^{sa}-\boldsymbol{n}-)!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik})}\ \sum_{(j_s=2)}\right.$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\ \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\quad-\boldsymbol{l}+1)}\sum_{(j_s=}$$

$$(l_{ik}{}_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}}^{\quad}\quad(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\quad}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{\quad j_{ik}-\mathbb{k}_1}\quad\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\ \mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(\ =n_{ik}+j_{ik}-j^{sa}-}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-\ -j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+\ ^{sa}+j_{sa}-\ -j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\ -j_s-\ +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\ )!}{(D-\ +s-\ -\boldsymbol{l_i}-\ )!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq\ - \boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}+1 \leq \boldsymbol{l}\ \leq \boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+\ \wedge j_s+j_{sa}^{ik}-1 \leq\ \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\ \leq \boldsymbol{n}\ -s$

$\boldsymbol{l_{ik}}\ +1>\boldsymbol{l_s} \wedge \boldsymbol{l}\ +j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge$

$D+j_{sa}^{ik}-\ \leq \boldsymbol{l_{ik}} \leq D\ \boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1 \wedge$

$D \geq\ < n \wedge l-\ =0 \wedge$

$j_{sa} \leq j_{sa}^{i}-\ \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\{s,\ ,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\} \wedge$

$s>3 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s + 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-1)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j^{sa} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l} \wedge$

$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{is}=j_{sa}^{ik}-1$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = \mathbb{k}_1+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}\right.$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 1)!}{(j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - s)!}{(D + j^{sa} - \boldsymbol{n} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)} \right.$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\quad-\boldsymbol{l}+1)}\sum_{(j_s=}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+}^{\boldsymbol{l}+1}\sum_{\boldsymbol{l}+1}^{(\quad)}\left(j^{sa}=j_{ik}-j_{sa}-j_{sa}^{ik}\right)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{}}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{ik}+j_{ik}-j^{sa}-1}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j^{} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j^{} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l} - \boldsymbol{l} - 1)!}{(j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D -)!}{(D + \boldsymbol{l} + s - \boldsymbol{l_i} -)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} + 1 \leq \boldsymbol{l} \leq \boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{i} - j_{sa}^{ik} + j_{} \wedge j_s + j_{sa}^{ik} - 1 \leq \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq {}^{sa} \leq \boldsymbol{n} + - \wedge$

$\boldsymbol{l_{ik}} - {}^{k} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_s} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{l} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \geq n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\{j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+j_{ik}-\mathbb{k}_2)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} =$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = \ + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \ + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)} \right.$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(+j_{sa}-s)!}{(+j^{sa}-\boldsymbol{n}-)!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{\boldsymbol{l}}^{(l_{ik}+\boldsymbol{n}-j_{sa}^{ik})}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l}+1}^{\boldsymbol{n}-D\ (j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_i-j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+1)}^{(n_i+1)}$$

$$\sum_{n_{is}=n_{is}+j_s-\mathbb{k}_1}\sum_{(n_{sa}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}+j_{sa}-j_{ik}-s-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{sa}}-j_{sa}+1>\boldsymbol{l_s}\wedge$

$\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\Big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{l=1}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{j_{ik}=j_s+j_{s-1}}^{(\boldsymbol{l_{sa}}-1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-\mathbb{k})}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{n_{is}+j_s-j_{ik}} \sum_{n_{ik}=\boldsymbol{n}-j_{ik}+1}^{(n_{sa}=\boldsymbol{n}-j^{sa}+1)} \frac{(n_i - n_{is} - 1)!}{2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum^{(\ )}_{(j^{sa}=j_{ik}+j_{sa}-j^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum^{(n_i-j_s+1)}_{(n_{is}=\ \mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum^{(\ )}_{(\ =n_{ik}+j_{ik}-j^{sa}\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-\ -j_{sa}-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}-j^{sa}+j_{sa}-\ -j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\ )!}{(\ ^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s}\ \leq D-\boldsymbol{n}+1 \wedge$$

$$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq\ ^{sa}+j_{sa}^{ik}-j_{sa} \wedge$$

$$j_{ik}+j_{sa}-\ ^{ik} \leq j^{sa}\ \boldsymbol{n}+j_{sa}-s \wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\ \wedge \boldsymbol{l_{sa}}+\ -j_s\ \boldsymbol{l_{ik}} \wedge$$

$$\boldsymbol{l_i} \leq\ +s-\boldsymbol{n}) \vee$$

$$(D \geq \boldsymbol{n} <\ \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge\ \leq D-\boldsymbol{n}+1 \wedge$$

$$1 \leq\ \ j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$$

$$j_{ik}+j_{sa}-\ \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$$

$$\ +1>\boldsymbol{l_s} \wedge$$

$$\boldsymbol{l_{sa}} \leq D+j_{sa}-\boldsymbol{n} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n})\Big) \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j_{sa}}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l})}^{(\boldsymbol{n}+j_{sa}-\boldsymbol{l})}
$$

$$
\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k})}^{(n_i-j_s+1)} \sum_{(n_i=\boldsymbol{n}+\mathbb{k}-j_s+1)}
$$

$$
\sum_{n_{is}+j_{ik}-\mathbb{k}_1}^{} \sum_{}^{j^{sa}-\mathbb{k}_2}
$$

$$
\sum_{n_{sa}+\mathbb{k}_2-j_{ik}}^{} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \quad)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_i - j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} + n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=j_{sa}+1)}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (\ - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l} - j_{sa})! \cdot (\boldsymbol{n} - j_{sa} - j^{sa} -}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} +$ $- j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik}$ $\boldsymbol{l_i} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D$ $\boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik}$ $\wedge j_s + j_{sa}^{ik} - 1$ $j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik}$ $j^{sa} \leq \boldsymbol{n}$ $j_{sa} - s \wedge$

$\boldsymbol{l_{sa}}$ $j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \leq D$ $_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i}$ $D + s - \boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l}$ $\geq 0 \wedge$

$j_{sa} \leq j_{sa}^{i}$ $\wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\{j_{sa}^{s}, \mathbb{k}$ $_{sa}^{i}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s + 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} + n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (n_{sa} - j^{sa})!} \cdot$$

$$\frac{(j_s - \boldsymbol{l} - 1)!}{(j_s - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_{ik} + \boldsymbol{l_{ik}} - j_{sa}^{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

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$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\Big) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^{s} = j_{sa}^{ik} \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_2 \cdot z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$fzS_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )} \right.$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - 1)!}{(D + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}^{ik}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_s}}\sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j_{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}-j_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{} \sum_{=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+}^{(n_i}$$

$$\sum_{n_{ik}=}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{}^{j_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_{is} - n_{is} - 1)!}{(\quad - 2)! \cdot (\quad - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{ik} - 1)!}{(\quad - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\ \wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+\ -j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}\ \ \boldsymbol{l}_{\boldsymbol{ik}}\big)\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}<D+j_{sa}-\boldsymbol{n}\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq\ ^{a}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\big)\big)$$

$$D\geq\boldsymbol{n}<n\wedge l\ \ k>=0\wedge$$

$$j_{sa}\leq\ -1\wedge j_{sa}^{ik}=\ -1\wedge j_{sa}=j_{sa}^{ik}-1\wedge$$

$$\boldsymbol{s}\colon\{j_{sa}^{s},\mathbb{k}_1,\ \ \mathbb{k}_2,j_{sa},\ldots\ _{sa}^{i}\}\wedge$$

$$s>\ =s+\mathbb{k}\wedge$$

$$\mathbb{k}_z\colon z=2\wedge\ =\mathbb{k}_1+\mathbb{k}_2\Rightarrow$$

$${}_{fz}S_{j_s,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}\right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j_{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{n} - \boldsymbol{l} - 1)!}{(\boldsymbol{n} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(\boldsymbol{n} + j_{sa} - j^{sa} - \boldsymbol{l} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-)!}{(D+j^{sa}-\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j_s=2)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{(j_{sa}=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{sa}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}-\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ +1)}$$

$$\sum_{n_{ik}=n_{is}-\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\left.\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\right) -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{ik}}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=n_{ik}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{is}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1)}^{(\ )}$$

$$\frac{(n_i+j_{sa}^{sa}+j_{sa}^{ik}-j_{sa}-\boldsymbol{l}_i-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{sa}^{sa}+j_{sa}^{ik}-j_{sa}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}_i-\boldsymbol{l}-1)!}{(\boldsymbol{l}_i-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l}_i)!}{(D+j_{sa}+s-\boldsymbol{l}_i-\boldsymbol{l}_i)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D+j_{sa}-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_{sa}}+j_{sa}-j_{sa}-\boldsymbol{l_{ik}}\Big) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D+j_{sa}-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \left(\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(\quad)} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}
$$

$$
\frac{(n_i - n_{i\quad} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} \quad n_{ik} - 1)!}{(j_{ik} - j_s \quad 1)! \cdot (n_{is} \quad j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} \quad j_{ik} - 1)! \quad n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\cdots-1)!\cdot(\boldsymbol{n}-\cdots)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\cdots-1)!}{\cdots+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(\cdots-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{\cdots+\boldsymbol{l_{sa}}-\cdots-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+\cdots-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-1)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}+j_{sa}-j^{sa}-s)!}\Bigg)$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{n}-\boldsymbol{l}+1)}\sum_{(j_s=2)}^{(\quad)}$$

$$\sum_{j_s+j_{sa}^{ik}-1\,(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - \ \wedge j_{sa}^{s} = j_{sa}^{i} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\}$

$s > 3 \wedge \boldsymbol{s} = s +$

$\mathbb{k}: z = 2 \wedge \ = \mathbb{k}_1 + \ \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=2)}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)} $$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \boldsymbol{l} + 1)! \cdot (\boldsymbol{l} - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{sa} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(j_s + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j_s + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = \boldsymbol{l_{sa}} + \boldsymbol{n} - D - j_{sa} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\text{[illegible]}\right)}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\text{[illegible]}-j_{sa}\right)!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-\text{[illegible]}}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot\text{[illegible]}+j_{sa}-j^{\text{[illegible]}})!}-$$

$$\sum_{k=\boldsymbol{l}\text{[illegible]}}\sum_{\text{[illegible]}D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\text{[illegible]}-j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\text{[illegible]}_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(\text{[illegible]}-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$(\text{[illegible]}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )} \right.
$$

$$
\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}
$$

$$
\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\quad k-j_{sa}^{ik}+1)}\sum_{\quad =2)}\right.$$

$$\sum_{\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_s-j_{sa}-1}\sum_{\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}}$$

$$\sum^{n}\sum_{n_i}^{(\quad +1)}$$

$$\sum_{n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}-j_{ik}-\mathbb{k}_2}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\sum_{n_{ik}=\boldsymbol{n}-j_{ik}+1}^{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}-j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+1)}^{(n_{is}+j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{j^{sa}+1)}$$

$$\frac{(n_i}{(j_s-2)!}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s+1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{sa}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

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$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} + 1 \leq \boldsymbol{l} \leq {}_{i}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} + 1 \leq$ $- 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$ $j_{sa}^{ik} - 1 \leq j_{ik}$ $j^{sa} + j_{sa}$ $- j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa}$ $s \wedge$

$\boldsymbol{l_{sa}} -$ $+ 1 > \boldsymbol{l_s}$

D $j_{sa} - \boldsymbol{n}$ $_a \leq D$ $\boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq$ $\boldsymbol{n} < n \wedge I = \mathbb{k}$ $= 0 \wedge$

j_{sa} $\leq j_{sa}^{s}$ $1 \wedge j_{sa}^{ik} = j_s$ $- 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}$: $\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}$ j $, j_{sa}^{i}\} \wedge$

$s \geq 3 \wedge s$ $s + \mathbb{k} \wedge$

$\mathbb{k}_z$: $z = 2$ $\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(j_s-\boldsymbol{l}-1)!}{(j_s-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+1)!}{(\boldsymbol{l_{ik}}+\boldsymbol{l_{ik}}-\boldsymbol{l}-\boldsymbol{l})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

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$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = 1 >= 0 \wedge$

$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{i} \ldots j_{sa}, j_{sa}^{i}\} \wedge$

$s \ldots s \wedge \ldots s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \ldots = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ \ )}\right.$$

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$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j^{sa}+1)}$$

$$\frac{(n_i - 1)}{(j_s - 2)!\,(n_i - n_{is}}$$

$$\frac{(n_{is} - n_{ik}}{(j_{ik} - j_s}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik}$$

$$\frac{(n_{sa}$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)} \right.$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!}$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!}$$

$$\frac{(j_{sa} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa} - 1} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{sa}}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-1)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-\boldsymbol{l_s})!}+$$

$$\sum_{j_s=2}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{}$$

$$\sum_{}^{(n_i-j_s+1)} \sum_{}^{(n_i-j_s+\mathbb{k}-j_s+1)}$$

$$\sum_{n_{is}+j_s-\mathbb{k}_1}^{} \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{}$$

$$\sum_{n_{ik}-\mathbb{k}_2-j_{ik}+1}^{} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s -)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(ik - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right.\quad-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}\right.\quad_{sa}^{ik}-j_{ik}-s\quad_{sa}\big)!}\cdot$$

$$\frac{(\boldsymbol{l_s}\quad\boldsymbol{l}-1)!}{\quad\boldsymbol{l}+\quad)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\quad)!}{(D+j^{sa}+s-\boldsymbol{n}-\quad-j_{sa})!\quad\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1$$

$$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\quad\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s\quad_{sa}^{ik}-1\leq j_{ik}\quad j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq\quad j^{sa}\leq\boldsymbol{n}+j_{sa}-\quad\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}+1>\boldsymbol{l_s}\wedge\quad+j_{sa}^{ik}-j_{sa}>$$

$$D+j_{sa}-\boldsymbol{n}<\quad\leq D+\quad+j_{sa}\quad-1)\vee$$

$$(D\geq\quad<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$2\leq\boldsymbol{l}\leq D\quad\boldsymbol{l_s}+j_{sa}-\quad-\boldsymbol{l_{sa}}\wedge$$

$$1\leq\quad\wedge j_{ik}-j_{sa}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-\quad\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\quad-1>\boldsymbol{l_s}\wedge$$

$$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\big)\wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}
$$

$$
\sum_{(n_i=j_s)} \sum_{(n_i=\boldsymbol{n}+\mathbb{k}-j_s+1)}
$$

$$
\sum_{n_{is}+j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=j_{ik}+j_{sa}-\mathbb{k}_2)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(j_s-\boldsymbol{l}-1)!}{(j_s-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+1)!}{(j_{ik}+\boldsymbol{l_{ik}}-j_s-\boldsymbol{l})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}\ \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!}$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \boldsymbol{l} + 1)! \cdot (\boldsymbol{l} - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa} + 1)!}{(j_s + \boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(j_s + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j_s + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = \boldsymbol{l_{sa}} + \boldsymbol{n} - D - j_{sa} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)$$

$$\sum_{j_{ik}=j_s}^{\boldsymbol{l_{ik}}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\boldsymbol{n}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\boldsymbol{l_{ik}}}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq{}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1)\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq{}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

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$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j_{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )} $$

$$ \sum_{j_{ik} = j_{sa}^{ik} + 1}^{j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(j_{ik} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1)} $$

$$ \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} $$

$$ \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot $$

$$ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot $$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j^{sa}=\boldsymbol{l_{ik}}+\ldots+2)}^{(\boldsymbol{l_{sa}}-\ldots)}$$

$$\sum_{\ldots+\mathbb{k}}\sum_{(n_{i\ldots}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}\ldots\mathbb{k}_2-j_{ik}+\ldots}^{n_{is}+j_s\ldots-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}\ldots-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\ldots)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(\ldots_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(\ldots j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\boldsymbol{n}-\mathbb{k}_1\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{n})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D-\boldsymbol{l_s}+s-\boldsymbol{n}-1)\Big) \wedge$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\Big) \wedge$

$\boldsymbol{n}=n \wedge I=\mathbb{k}>=0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\} \wedge$

$s>3 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \quad \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \quad \sum_{(\quad j_s+1)}^{(\quad j_s+1)}
$$

$$
\sum_{\quad}^{n_{is}+j_s-j_{ik}} \quad \sum_{(n_{ik}+j_{ik}-j^{sa}}^{(\quad)}
$$

$$
\sum_{\quad+1}^{\quad} \quad \sum_{(\quad \boldsymbol{n}-j^{sa}+1)}^{\quad}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{\quad - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(\quad - n_{sa} - 1)!}{(\quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \quad \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (n_{sa} - j^{sa})!} \cdot$$

$$\frac{(j_s - \boldsymbol{l} - 1)!}{(j_s - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} - \boldsymbol{l_{sa}} - j_{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \ \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+\ \ -1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{\ \ }=j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{S}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s}=s \ \ \wedge$

$\mathbb{k}_z: \ \ =2 \wedge \mathbb{k}=\mathbb{k}_1 \ \ \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}\ \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GULDUNYA

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 1)!}{(j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - j_{sa})! \cdot (j^{sa} - j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-_{k}-j_{sa}\right)!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}$$

$$\frac{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!(\boldsymbol{n}+j_{sa}-j$$

$$-\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}\sum_{(j_s$$

$$\sum_{j_{ik}=}^{(\quad)}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\quad)}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(\boldsymbol{l}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(\boldsymbol{n}-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\boldsymbol{l}\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

GÜLDÜNYA

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{sa}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{sa}+j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l})}^{(j_{sa}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{j_{sa}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}-j_{sa}^{ik})}^{(j_{sa}+j_{sa}-\boldsymbol{l})} \sum_{(j_s=\boldsymbol{l}-j_{sa}^{ik})}^{(j_{sa}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_{sa}-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot$$

$$\frac{(n_{is} \quad n_{ik} - 1)!}{(j_{ik} - j_s \quad 1)! \cdot (n_{is} \quad j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} \quad j_{ik} - 1)! \quad n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜNYA

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{s}$ $- s = \boldsymbol{l_{sa}}$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n}$ $1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa}$ $\wedge j_{sa}^{s} = j_{sa}^{i}$ $1 \wedge$

$\boldsymbol{s}$: $\left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\}$

$s > 3 \wedge \boldsymbol{s} = s +$

$\mathbb{k}$ $z = 2 \wedge$ $= \mathbb{k}_1 +$ $\Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \boldsymbol{l} + 1)! \cdot (\boldsymbol{l} - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})! \cdot (j_{ik} - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{l_{sa}})! \cdot (j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l} + 1}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{\boldsymbol{l_{ik}}=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{\boldsymbol{l_{ik}}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{(j_s = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(\ )}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{sa} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge j_{sa} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_{sa} \leq j_{ik} - j_{sa} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$j_{sa} + j_{sa}^{ik} - 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

GÜLDÜNYA

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-\ldots}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(\ldots j_{ik}+j_{\ldots}-j_{sa}^{ik})}^{(\ldots)}
$$

$$
\sum_{\ldots n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(\ldots=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s\ldots)}
$$

$$
\sum_{n_{is}+\ldots j_{ik}-\mathbb{k}_1}^{n_{is}+\ldots j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(\ldots j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \ldots)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\ldots - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}+j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

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$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{i} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-\boldsymbol{l}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-1)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-1)!\cdot(j^{sa}+j_{sa}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{l_{sa}})!\cdot(j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+}$$

$$\sum_{j_{ik}=j^{sa}-j_{sa}}^{(j_{sa}-\boldsymbol{l})}$$

$$\sum_{j_{ik}=j^{sa}-j_{sa}}^{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i-j^{sa}-j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} \quad - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} \quad j_{sa}^{ik} - j_{ik} \quad j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} \quad \boldsymbol{l} - 1)!}{\boldsymbol{l_s} \quad \boldsymbol{l} + \quad ! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \quad)!}{(D + j^{sa} + s - \boldsymbol{n} \quad - j_{sa})! \quad (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + \quad \leq j_{ik} \leq j \quad + j_{sa}^{ik} - j \quad \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} \quad _{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - \quad = \boldsymbol{l_{ik}} \wedge \boldsymbol{l} \quad j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq \quad + s - \boldsymbol{n} \wedge$

$D \quad \boldsymbol{n} < n \wedge \quad \mathbb{k} >= \quad \wedge$

$j_{sa} \quad j_{sa}^{i} - 1 \wedge j_{sa}^{ik} \quad _{sa} - 1 \wedge \quad = j_{sa}^{ik} - 1 \wedge$

$\quad \{j_{sa}^{s}, \mathbb{k} \quad _{sa}^{ik}, \mathbb{k}_2, j_{sa}, \ldots \quad _{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s \quad$

$\mathbb{k}_z : z = 2 \quad \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{sa}+1)}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(n_{sa}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{l_{sa}}-s)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{sa}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>=0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s>3 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j_{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )}\sum_{+\boldsymbol{n}+j_{sa}-D-s)}$$

$$\sum_{+\mathbb{k}}^{(\ )}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{=n_{is}+j_s-j_{}}^{(\ )}\sum_{\mathbb{k}_1}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\geq \boldsymbol{n} < \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_{} \leq j_{ik}- \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}- \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$-j_{sa}^{ik} = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}
$$

$$
\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1)}
$$

$$
\sum_{(j^{sa} = j_{sa} + 1)}
$$

$$
(n_i - \quad + 1)
$$

$$
\sum
$$

$$
n_i \quad \mathbb{k} \; (n_{is} = \boldsymbol{n} + \mathbb{k} - j_s \quad)
$$

$$
j_{ik} - \mathbb{k}_1 \quad (\quad + j_{ik} - j^{sa} - \mathbb{k}_2)
$$

$$
\sum
$$

$$
n_{ik} = \boldsymbol{n} + \quad j_{ik} + 1 \quad (n_{sa} \quad {}^{a} + 1)
$$

$$
\frac{(n_i \quad n_{is} - 1)!}{(j_s \quad 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n \quad - n_{ik} - 1)!}{(j_{ik} \quad \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{s} \quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}
$$

$$
\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1)}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{ik}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}-j_{sa}-s>0 \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>=0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{s}-j_{sa}-1 \wedge j_{sa}^{s}-j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s} \leq \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{s}-j_{sa}, j_{sa}, \cdots j_{sa}\} \wedge$

$s>0 \wedge \boldsymbol{s}=s+\mathbb{k}$

$\mathbb{k}_z: z=\ \wedge \mathbb{k}=\mathbb{k}_1+\ \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{D+j_{sa}-s)!}{(D+j^{sa}-\boldsymbol{n}-j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \le D + s - \boldsymbol{n} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, \ldots, j_{sa}} = \sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{\boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{l} - j_{sa} + 1} \sum_{j_{ik} = \quad + 1}^{(\quad)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}
$$

$$
\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l} - j_{sa} + 1} \sum_{(j^{sa} = j_{ik} - j_{sa} - j_{sa}^{ik})}^{(\ )}$$

$$\sum_{\boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - \boldsymbol{n} + 1)}^{(n_i - \boldsymbol{n} + 1)}$$

$$\sum_{n_{is} = n_{is} + j_s - j_{sa} - \mathbb{k}_1}^{(\ )} \sum_{(n_{sa} = n_{is} + j_s - j_{sa} - \mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{sa} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \boldsymbol{l_s} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + s \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} \leq j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} - 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} \leq j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_s} \leq D - \boldsymbol{n} + s - \boldsymbol{n} - 1 \wedge$

$D \leq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} + n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum^{(\ )}_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-1)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>=0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{i}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\}$

$s>3 \wedge \boldsymbol{s}=s+1$

$\mathbb{k}: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum^{(\ )}_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \quad (\boldsymbol{n} - j^{sa})!}$$

$$\frac{(\quad \boldsymbol{l} - 1)}{(\boldsymbol{l_s} \quad - \boldsymbol{l} + 1) \quad - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} \quad s)!}{(D + j^{sa} - \boldsymbol{n} \quad)! \cdot (\boldsymbol{n} + j_s \quad - j^{sa} - s)!}$$

$$\sum_{\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{\quad = j_{sa}^{ik} + 1}^{\quad - \boldsymbol{l} + 1} \quad \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\quad)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \quad \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \quad \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum
$$

$$
\boldsymbol{l_{ik}} \sum
$$

$$
\sum_{j_{ik} = j_s} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}
$$

$$
\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{ik}}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{is}=n_{ik}+j_{ik}-j^{sa}-}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l})!}{(D+j^{sa}+s-\boldsymbol{l_s}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq \boldsymbol{l} - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq \boldsymbol{l_i} + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 1 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{i}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$z = 3 \wedge \boldsymbol{n} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \ \sum_{(n_{sa}=}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \ \sum_{j^{sa}+1)}$$

$$\frac{(n_i \qquad -1)}{(j_s-2)! \cdot (n_i-n_{is} \qquad +1)!} \cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s \qquad)! \cdot (n_{is}+j_s \qquad -n_{ik}-j_{ik})!} \cdot$$

$$\frac{(n_{ik} \qquad -n_{sa}-1)}{(j^{sa}-j_{ik} \qquad -1)! \cdot (\qquad +j_{ik}-n_{sa}-j^{sa})!} \cdot$$

$$\frac{(n_{sa} \qquad -1)!}{(n_{sa}+j_{sa} \qquad -\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)! \cdot (j_s-2)!} \cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+ \qquad -\boldsymbol{n}-\boldsymbol{l_{sa}})! \cdot (\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)! \cdot \left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>=0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s>3 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )}\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\left(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1\right)^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\left(n_{sa}=\boldsymbol{n}-j^{sa}+1\right)^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - \quad)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - \quad^{a} - s)!}$$

$$\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-\quad)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-\quad+2)} \quad$$

$$\sum_{j_{ik}=\quad_{sa}^{ik}-1}^{(\quad)} \left(j^{sa}-\quad-j_{sa}^{ik}\right)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{+ j^{sa} \quad j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} \quad - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D > \quad m \wedge \boldsymbol{l} \neq \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{i} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} \quad - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} $$

$$ \sum_{j_{ik}=j_s+j_{sa}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{ik})}^{(} $$

$$ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=n_i-j_s+1)}^{(n_i-j_s+1)} $$

$$ \sum_{n_{ik}=\boldsymbol{n}+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot $$

$$ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} - $$

$$ \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} $$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right.}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa}\right.} \cdot$$

$$\frac{(\boldsymbol{l_s}}{\boldsymbol{l_s}} \cdot$$

$$\frac{(D}{(D + j^{sa} + s - \boldsymbol{n}}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s +$ $\leq j_{ik} \leq$ $+ j_{sa}^{ik} - j$ $\wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}$ $_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik}$ $= \boldsymbol{l_{ik}} \wedge \boldsymbol{l_{i}}$ $j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D +$ $\boldsymbol{n} \leq \boldsymbol{l_i} \leq$ $\boldsymbol{l_s} + s - \boldsymbol{n} -$ $\wedge$

D $\boldsymbol{n} < n \wedge$ $\mathbb{k} >=$ $\wedge$

j_{sa} $j_{sa}^{i} - 1 \wedge j_{sa}^{ik}$ $j_{sa} - 1 \wedge$ $= j_{sa}^{ik} - 1 \wedge$

$\in \{j_{sa}^{s}, \mathbb{k}_1$ $_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \ldots$ $_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s$ $\wedge$

$\mathbb{k}_z \cdot z = 2$ $\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-\boldsymbol{n}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(-j^{sa})!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{-j_s-1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{+j^{sa}-\boldsymbol{l}\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}\ \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

GÜLDÜNYA

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}$ [illegible] $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} +$ [illegible] $- s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} -$ [illegible] $\wedge j_{sa}^{s} = j_{sa}$ [illegible] $1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{l}$ [illegible]

$s > 3 \wedge \boldsymbol{s} = s +$ [illegible] $\wedge$

$\mathbb{k}_{-}: z = 2 \wedge$ [illegible] $= \mathbb{k}_1 +$ [illegible] $\Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik}+1)}^{(\ \ )} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \quad (\boldsymbol{n} - j^{sa})!}$$

$$\frac{(\quad \boldsymbol{l} - 1)}{(\boldsymbol{l_s} \quad - \boldsymbol{l} + 1) \quad - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} \quad)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} \quad (j^{sa} + j_s \quad - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{s} \quad - \boldsymbol{l_{sa}} - s)}{(D + j^{sa} - \quad - \boldsymbol{l_{sa}})! \quad + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 2)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{\boldsymbol{k}=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_{sa} + 1)}^{(\boldsymbol{l_{ik}} + j_{sa} - j_{sa} + 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_{is} = j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{sa} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i + \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} + j_{sa} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

GÜLDÜNYA

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{z=2,\ldots,j_{ik}=j_{sa}} = \sum_{\ldots} \sum_{(j_{sa}=j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{sa}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )}$$

$$\sum_{\boldsymbol{n} = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + 1)}^{(n_i + 1)}$$

$$\sum_{n_{is} = n_{is} + j_s - \mathbb{k}_1}^{n} \sum_{(n_{sa} = n_{is} + j_{sa} - \mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\Big) \wedge$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=n_i-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+j_{ik}-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}
$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} \quad - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} \quad j_{sa}^{ik} - j_{ik} \quad j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} \quad \boldsymbol{l} - 1)!}{\boldsymbol{l_s} \quad - \boldsymbol{l} + \quad ! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \quad)!}{(D + j^{sa} + s - \boldsymbol{n} \quad - j_{sa}) \quad (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s +$ $- 1$ $\leq j$ $+ j_{sa}^{ik} -$ $\wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} +$ $- s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l}$ $\wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j$ $> \boldsymbol{l_{ik}} \wedge$

$D + j$ $- \boldsymbol{n} \leq \boldsymbol{l_{sa}} \leq$ $+ \boldsymbol{l_{ik}} + j_{sa} -$ $_{sa} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i}$ $D + \boldsymbol{l_{sa}}$ $s - \boldsymbol{n}$ $_{sa}) \vee$

$(D \geq$ $< n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}$ $\boldsymbol{l_s} \leq D -$ $\boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} +$ $- j_{sa}^{ik} \leq j$ $\leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} +$ $= \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l}$ $< \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

GULDUNYA

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
{}^{j^{sa}+j_{sa}} \sum_{(\quad j_{sa}-\boldsymbol{l})}
$$

$$
\sum_{j_{ik}=\quad+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

GÜLDÜNYA

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} - \boldsymbol{l} + 1)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)}$$

$$\sum_{\boldsymbol{n} + \mathbb{k}}^{(n_i \quad + 1)} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} \quad + 1)}$$

$$\sum_{n_{ik} = \quad - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(j^{sa} = \quad - j_{ik} + 1)}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(\quad - n_{is} - 1)!}{(\quad - 2)! \cdot (\quad - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{\quad} - n_{ik} - 1)!}{(\quad - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{\quad} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}-1)!\cdot(\boldsymbol{l_s}-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1) \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}+s-(\boldsymbol{n}-j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}
$$

$$
\sum_{j_{ik} = j_{sa}^{ik}}^{\boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa} - 1} \quad \sum_{(j^{sa} = \boldsymbol{l_{sa}} + 1)}^{(\boldsymbol{l_{sa}} + 1)}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \quad \sum_{(n_{is} = j_s)}^{(n_i - j_s + 1)}
$$

$$
\sum_{n_{ik} = \boldsymbol{n} + j_s - j_{ik} + 1}^{n_{is} + j_s - j_{ik}} \quad \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{j^{sa}+1)}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}}{(j_{ik}-j_s}$$

$$\frac{(n_{ik}}{(j^{sa}-j_{ik}}$$

$$\frac{(n_{sa}}{(n_{sa}+j_{ik}}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(+\boldsymbol{l}}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜNYA

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum^{(\ )}_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} -$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} +$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n}$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

$$
\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+j_s-j_{ik}-\mathbb{k}_1-j_{ik}+1} \sum_{(n_{sa}=\boldsymbol{n}+j_{ik}-j^{sa}-\mathbb{k}_2+1)}^{(\boldsymbol{n}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_{is}-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (n_{sa} - j^{sa})!} \cdot$$

$$\frac{(j_s - \boldsymbol{l} - 1)!}{(j_s - \boldsymbol{l}_s - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} - \boldsymbol{l_{sa}} - j_{sa})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge$

$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1 \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}-j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{sa}}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}-1 \wedge$

$\boldsymbol{s}: (j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_1, j_{sa}, \cdots, j_{sa}) \wedge$

$s > 0 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\exists_z: z=z+\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜNYA

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 1)!}{(j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{sa}^{ik} - \boldsymbol{l_s})! \cdot (\boldsymbol{l_{ik}} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-[illegible]}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-[illegible])!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j[illegible]s)!}-$$

$$\sum_{[illegible]}\sum_{(j[illegible]-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j[illegible]-j_{sa}}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left([illegible]+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{([illegible]-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$([illegible]<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$$

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$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\quad-\boldsymbol{l}+1)}\sum_{(j_s=}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_s-\boldsymbol{l}+1}^{(\quad)}\ (j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{ik}+j_{ik}-j^{sa}-1}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j \quad - \mathbb{k} \quad \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} \quad - j_{sa}\right)!} \cdot$$

$$\frac{\quad - \boldsymbol{l} - 1)!}{- j_s - \quad 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \quad)!}{(D + \quad + s - \quad - \boldsymbol{l_i} - \quad)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \ D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j \leq j^{sa} \leq + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D + s - \boldsymbol{n} \leq D + j_{sa} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \quad n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j \quad - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} \quad _{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

GÜLDÜNYA

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \quad \sum_{(j^{sa}=j_{ik}+j_{sa}^{ik})}^{(\quad)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \quad \sum_{(\quad+j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+j_s-j_{ik}}^{(\quad+j_s-j_{ik})} \quad \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(\quad - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}
$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is}}$$

$$\frac{(n_{is} - n_{ik}}{(j_{ik} - j_s}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j \quad \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

GÜLDÜNYA

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik})} \sum_{(j_s=2)}
$$

$$
\sum^{j^{sa} + j_{sa}^{ik} \cdots (\boldsymbol{l_s} + \cdots - \boldsymbol{l})}
$$

$$
j_{ik} = \boldsymbol{l_{ik}} \cdots - D \; (j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} \cdots)
$$

$$
\sum^{n} \sum^{(n_i - j_s + 1)}
$$

$$
n_i = \boldsymbol{n} + \mathbb{k} \; (\cdots - j_s + 1)
$$

$$
\sum^{\cdots + j_s - j_{ik}} \sum^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}
$$

$$
n_{ik} = \boldsymbol{n} + \cdots - j_{ik} + 1 \quad \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{\cdots - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{\cdots_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_s+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - 1)!}{(j_s - 2)! \cdot n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (\ - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l} - j_{sa})! \cdot (\boldsymbol{n} - j_{sa} - j^{sa} -}$$

$$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \ \boldsymbol{l_{ik}} \wedge$$

$$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{sa}} \ _{sa} + 1 > \boldsymbol{l_s} \wedge$$

$$+ j_{sa} \ < \boldsymbol{l_{sa}} \leq D \ \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$$

$$D + s \ \boldsymbol{n} < \ D \ \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$$

$$(D \geq \boldsymbol{n} < \ \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$1 \leq j_s \leq \ - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

GULDUNYA

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_s, j_{sa}} = \sum_{\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{\boldsymbol{l_s}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}-j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \qquad \sum_{}^{(\boldsymbol{l_{sa}}+1)}$$

$$\sum_{}^{(n_i-j_s+1)}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}^{} \qquad \sum_{\boldsymbol{n}+\mathbb{k}-j_s+1)}^{}$$

$$n_{is}+j_s \qquad -\mathbb{k}_1 \qquad (n_{ik} \qquad -\mathbb{k}_2)$$

$$\sum_{n_{ik}}^{} \qquad \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s -)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(ik - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{ik}+1)}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=n_{ik}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{is}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1)}^{(\ )}$$

$$\frac{(n_i+j_{sa}^{sa}+j_{sa}^{ik}-j_{sa}-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{sa}^{sa}+j_{sa}^{ik}-j_{sa}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}-\boldsymbol{l}-1)!}{(\boldsymbol{l_i}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-s)!}{(D+j_{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-\boldsymbol{l_s})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \geq D + j_{sa} - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \ldots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = \boldsymbol{n} + \mathbb{k} \wedge$

$\boldsymbol{n} = \boldsymbol{n} \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}} \sum_{(j_s=1)}^{(\ )} \right.$$

GÜLDÜNYA

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )} \sum_{(j^{sa}=j_{sa})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(\quad-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l}_{\quad})!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\quad-s)!}\Bigg)+$$

$$\left(\sum_{k=\ _i\boldsymbol{l}}^{(\ )} \sum_{(j_s=1)}\right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\left(\boldsymbol{l_{sa}}-\ _i\boldsymbol{l}+1\right)} \sum_{(j^{sa}=j_{sa}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot(j^{sa}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

GÜLDÜNYA

$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )}\sum_{(j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\ \sum_{n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right.\qquad-\mathbb{k}_2\big)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}\right.\qquad_{sa}^{ik}-j_{ik}-s\qquad_{sa}\big)!}\cdot$$

$$\frac{(\qquad-\boldsymbol{l_i})!}{(D\qquad-\boldsymbol{n}\qquad)!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+\qquad\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq\qquad_{ik}\leq j^{sa}+j_{sa}^{ik}\qquad j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+\qquad-j_{sa}=\boldsymbol{l_{ik}}$

$\boldsymbol{l_{ik}}\leq D+j_{sa}^{ik}-\boldsymbol{n}\wedge\boldsymbol{l_i}\leq D\qquad-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge I\qquad>=0\wedge$

$j_{s}\leq j_{sa}-\qquad\wedge j_{sa}^{ik}=\qquad-1\wedge j_{sa}^{s}=j_{sa}\qquad1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,\qquad,\cdots,j_{sa}^{s}\qquad\right.$

$s>3\qquad=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\qquad=\mathbb{k}_1+\qquad\Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}}=\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(\boldsymbol{l_{sa}}-\ _{\boldsymbol{i}}\boldsymbol{l}+1\right)}\sum_{(j^{sa}=j_{sa})}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\quad - j^{sa})!}$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}}{(\boldsymbol{l_{ik}} - j_{ik} - \quad + 1)! \cdot (j_{ik} - \quad)!} \cdot$$

$$\frac{(D - \quad \boldsymbol{l_{sa}} - s}{(\quad - j^{sa} - \boldsymbol{n} - \quad)! \cdot (\quad - \quad - s)!} -$$

$$\sum_{k=\ \boldsymbol{l}}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )} \sum_{(j^{sa}=j_{sa})}$$

$$\sum^{n} \quad \sum_{\boldsymbol{n}+\mathbb{k}\ (n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\quad_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(\quad - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \quad \boldsymbol{n} < \quad \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j \quad - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

GÜLDÜNYA

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{\boldsymbol{i^l}}^{(\quad)} \sum_{(j_s=1)}^{\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{i^l} - j_{sa}}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{(\quad)} \sum_{(j^{sa}=j_{ik}+j_{sa}-\quad)}
$$

$$
\sum_{n_i=\quad}^{n} \sum_{(n_{ik}=\boldsymbol{n}\quad-j_{ik}+1)}^{(\quad-\mathbb{k}_1+1)} \sum_{n_{sa}=\quad}^{+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(j^{sa}=\quad)}^{j^{sa}+1}
$$

$$
\frac{(n_i \quad n_{ik} - 1)!}{(j_{ik} \quad)! \cdot (n_i \quad n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} - \quad - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\quad}^{(\quad)} \sum_{\boldsymbol{i^l}}^{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{(\quad)} \sum_{(j^{sa}=j_{sa})}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

GÜLDÜNYA

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k = {}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_s = 1)}^{(\ )} \right.$$

$$\sum_{j_{ik} = j_{sa}^{ik}}^{(\ )} \sum_{(j^{sa} = j_{sa})}^{(\ )}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} \right) +$$

GÜLDÜNYA

$$\left(\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_s=1)}^{\left(\boldsymbol{l_{sa}}-\ _{i}\boldsymbol{l}+1\right)}\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j^{sa}=j_{sa})}\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}\right.$$

$$\frac{(\boldsymbol{n}_i-n_{ik}$$

$$(j_{ik}-2)!\cdot$$

$$\frac{-n_{sa}-$$

$$(j^{sa}-j_{ik}-$$

$$\frac{(n_{sa}-1)!}{(\boldsymbol{n}+j^{sa}-$$

$$\frac{(-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )}\sum_{(j^{sa}=j_{sa})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ _{i}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$$

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$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\left(\sum_{\boldsymbol{l}} \sum_{(j_s=1)}^{(\quad)} \right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\quad)}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j \quad \mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} \right) +$$

$$\left(\sum_{k= \quad \boldsymbol{l}} \sum_{(j_s=1)}^{(\quad)} \right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}- \quad \boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}\right.}{(\boldsymbol{l_{ik}}-j_{ik}-\quad+1)!\cdot(j_{ik}-\quad)!}\cdot$$

$$\frac{(D-\quad-s)!}{(D-j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}\quad\cdot(\boldsymbol{n}+\quad-s)!}\Big)-$$

$$\sum_{k=\quad}^{\quad}\sum_{(j_s=1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}\sum_{(j^{sa}=j_{sa})}^{(\quad)}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(\quad-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\quad\boldsymbol{n}<\quad\wedge\boldsymbol{l}=\quad_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$1\leq j_s\leq j\quad-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\ {}_{i}\boldsymbol{l}} \sum_{(j_s=} \right.
$$

$$
\sum_{{}_{ik}} \sum_{(\quad = j_{sa})}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(\quad - j_{ik}+1)}^{(n_i - j_{ik} - \quad + 1)} \sum_{=\boldsymbol{n} - j^{sa}+1}^{n_{ik} + j_{ik} - \quad - \mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} \quad}{\quad - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(\quad - n_{sa} \quad 1)!}{(\quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} \right) +
$$

$$
\left(\sum_{k=\ {}_{i}\boldsymbol{l}} \sum_{(j_s=1)} \right.
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}} - \ {}_{i}\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2 - j_{ik}+1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa}=\boldsymbol{n} - j^{sa}+1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=}\sum_{(j_s=1)}^{(\ \ )}$$

$$\sum_{j}\sum_{j_{sa}^{ik}\,(j^{sa}=j_{sa})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum^{(}\ \sum_{n_{ik}=j_{ik}-\mathbb{k}_1+1\ \ =n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+j_{sa}^{ik}+j_{ik}-\ \ -j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_{\ \ }-\mathbb{k}_1-\ \ )!\cdot\left(\boldsymbol{n}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\ \ +1\wedge$$

$$1<j_s\leq j_{ik}\ \ _{sa}^{ik}+1\wedge\ \ +j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{\ \ }\leq\boldsymbol{n}+j_{\ \ }\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$$

$$\boldsymbol{l_i}\leq D+s-\ \ )\vee$$

$$(D\ \ \boldsymbol{n}\ \ m\wedge\boldsymbol{l}=\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{\ \ }-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{sa}}-j_{sa}+1>\boldsymbol{l_s}\wedge$$

$$\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\Big)\wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\ \ \boldsymbol{i}\boldsymbol{l}} \sum_{(j_s=1)}^{(\ \ )}
$$

$$
\boldsymbol{l}+1 \left(\boldsymbol{l}_{\boldsymbol{s}\boldsymbol{a}} \ \ \boldsymbol{i}\boldsymbol{l}+1\right)
$$

$$
\sum_{=j_{sa}^{ik}} \ \ (j^{sa}=j_s
$$

$$
\mathbb{k}_1+1) \qquad + j_{ik} - j^{sa} - \mathbb{k}_2
$$

$$
\sum_{n_i=\ \ k}^{n} \ (n_{ik}=\boldsymbol{n}+ \qquad - j_{ik}+1) \quad n_{sa} \qquad j^{sa}+1
$$

$$
\frac{(n_i \qquad _{ik} - 1)!}{(j_{ik} \qquad)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} \qquad n_{sa} - 1)!}{(j^{sa} - j \qquad 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l}_{\boldsymbol{ik}} - \boldsymbol{l}_{\boldsymbol{s}} - j_{sa}^{ik} + 1\right)!}{(\boldsymbol{l}_{\boldsymbol{ik}} - j_{ik} - \boldsymbol{l}_{\boldsymbol{s}} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l}_{\boldsymbol{sa}} + j_{sa}^{ik} - \boldsymbol{l}_{\boldsymbol{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l}_{\boldsymbol{sa}} - j^{sa} - \boldsymbol{l}_{\boldsymbol{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l}_{\boldsymbol{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l}_{\boldsymbol{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\ \ \boldsymbol{i}\boldsymbol{l}} \sum_{(j_s=1)}^{(\ \ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ \ )}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\ \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\quad)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\Big)\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\Big)\Big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,\ \ ,\cdots,j_{sa}^{i}\right\}\wedge$

$s>3\wedge\boldsymbol{s}=\ \ +\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}}=\left(\sum_{k=\ \ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )}\ \sum_{(j_s=1)}^{(\ )}\right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}}\ \sum_{(j^{sa}=j_{sa})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!}\Bigg)+$$

$$\left(\sum_{k=}\sum_{(j_s=1)}^{(\ )}\right.$$

$$\sum_{j_{ik}=}\sum_{(j^{sa}=j_{sa}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

$$\sum_{k=\ \boldsymbol{l}}\sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}\sum_{(j^{sa}=j_{sa})}^{(\ )}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\ \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\quad)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}\quad\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}\quad 1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>3\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa}}=\sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}}\ \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}\ \sum_{(j^{sa}=j_{sa})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!}\ -$$

$$\sum_{k=\ \ \boldsymbol{i}\boldsymbol{l}}^{(\ \ )}\sum_{(j_s=}$$

$$\sum_{j_{ik}}\sum_{ik}^{(\ \ )}(j\ \ =j_{sa})$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n}^{(\ \ )}\sum_{n_{sa}=n}\sum_{j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i+j^{sa}+j_{s}-j_{ik}-\ \ -j_{sa}-\mathbb{k}_1-\ \ )!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\ \ +j^{sa}+\ \ -j_{ik}-s-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} =\ \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D+j_{sa}-\boldsymbol{n} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} =\ \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} =\ \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

GUDUNYA

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j_{sa}} = \sum_{k=\ {}_{i}\boldsymbol{l}} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ \ -\ {}_{i}\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}}^{n} \sum_{(n_{ik}=\ \ \mathbb{k}_2-j_{ik}+1)}^{(n_i-\ \ -\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\ {}_{i}\boldsymbol{l}} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ \ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - \quad)!}$$

GÜLDÜNYA

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\cdots}_{j_{ik}, j^{sa}} = \left(\sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \right.$$

$$\left. \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \right.$$

$$\sum_{(\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1)} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\ \sum_{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik}+1)}$$

$$\sum_{+\mathbb{k}}\ \sum_{(n_i-j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_{is}+j_s-\mathbb{k}_1}^{+\mathbb{k}}\ \sum_{(n_{ik}+\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}+\mathbb{k}_2-j_{ik}+1}^{-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{a-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-1)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{j^{sa}+1)}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{i}-n_{ik}-\mathbb{k}_{}-1)!}{(j_{ik}-j_s-1)!\cdot(}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-1)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}+1 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=\cdots+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\cdots+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - 1)! \cdot (\boldsymbol{n} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 1)!}{(j_s - 2)!} \cdot$$

$$\frac{(j_{sa}^{ik} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - j_{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}\right.
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
\left.\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\right.\cdot
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}-j_{sa}-1}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\ )}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{(\ )}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ )}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_s-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\quad \mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{i\quad}-1)!}{(j_s-2)!\cdot(\quad j_s+1)!}\cdot$$

$$\frac{-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\,(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (\quad - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l} - j_{sa})! \cdot (\boldsymbol{n} - j_{sa} - j^{sa} -}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq \quad \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + \quad - j_{sa} > \boldsymbol{l_{ik}}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa} \quad j_{sa} - 1 \wedge j_{sa}^{s} \quad j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s} \quad \left(j_{sa}^{s}, \cdots, \mathbb{k}_1 \quad {}_{sa}^{ik}, \mathbb{k}_2, j_{sa} \quad \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k}$

$\mathbb{k}_z : z = \quad \wedge \mathbb{k} = \mathbb{k}_1 + \quad \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GULDUNYA

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-1)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}+\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)} \right)
$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}+j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}-j_{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{(\ )}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ )}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+\mathbb{k}-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{+j_{ik}-}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{is}-j_s+1)!}\cdot$$

$$\frac{-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-j}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq\ \leq j^{sa}+j_{sa}^{ik}\ _{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+\ -j_{sa}>\boldsymbol{l_{ik}}$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}\ -j_{sa}-1\wedge j_{sa}^{s}\ _{sa}^{ik}-1\wedge$

$\boldsymbol{s}\{j_{sa}^{s},\cdots,\mathbb{k}_1\ _{sa}^{ik},\mathbb{k}_2,j_{sa}\ \cdots,j_{sa}^{i}\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}$

$\mathbb{k}_z:z=\ \wedge\mathbb{k}=\mathbb{k}_1+\ \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}\right.$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(\boldsymbol{l}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-s)!}{(D+j^{sa}-\boldsymbol{n}-s)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}\right.$$

$$\sum_{lk=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{lk}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{\boldsymbol{l_s}=\boldsymbol{l}}^{\boldsymbol{l_{sa}}-1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+\mathbb{k}-D-1}^{\boldsymbol{l_{sa}}+\boldsymbol{n}-D-1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n_{is}+j_{ik}-\mathbb{k}_1}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )}$$

$$\sum^{(n_i + 1)}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}\ (n_{is}=\boldsymbol{n}+\mathbb{k}-1)}$$

$$\sum^{(\ )}$$

$$\sum_{n_{is}+j_s-\mathbb{k}_1\ (n_{sa}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i + j^{sa} + j_{sa}^{ik} - \quad - s - \quad - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \quad - \mathbb{k}_2)! \cdot (\boldsymbol{n} \quad ^{sa} + j_{sa}^{} - j_{ik} - s - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \quad < n \wedge \boldsymbol{l_s} > \quad - \boldsymbol{n} + 1 \wedge$

$D \quad \boldsymbol{l_s} + j_{sa} \quad - \boldsymbol{l_{sa}} \quad \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \quad \leq j_{ik} - j_{sa}^{ik} \quad \wedge j_s + j \quad 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$\quad + j_{sa} \quad j_{sa}^{ik} \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \quad \wedge \quad + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \quad \boldsymbol{n} < \quad \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} \quad \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{+j_{ik}-\ \ a-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} \ \ 1)!}{(j_s \ \ 2)! \cdot (n_i \ \ j_s + 1)!} \cdot
$$

$$
\frac{\ \ - n_{ik} \ \ \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \ \ n_{is} + j_s \ \ n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} \ \ n_{sa} - 1)!}{(j^{sa} \ \ j_{ik} - 1)! \ \ n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+\ -j_{sa} > \boldsymbol{l_{ik}}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}\ -j_{sa}-1 \wedge j_{sa}^{s}\ _{sa}^{ik}-1 \wedge$

$\boldsymbol{s} \in \{j_{sa}^{s}, \cdots, \mathbb{k}_1\ _{sa}^{ik}, \mathbb{k}_2, j_{sa}\ \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k}$

$\mathbb{k}_z : z = \ \wedge \mathbb{k} = \mathbb{k}_1+\ \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}\ \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-1)!\cdot(j^{sa}-j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}\ \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-_{k}-j_{sa}\right)!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}$$

$$\frac{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!(\boldsymbol{n}+j_{sa}-j$$

$$-\sum_{k=}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}\sum_{}^{(D-s+1)}$$

$$\sum_{j_{ik}=}^{j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(\boldsymbol{l}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(\boldsymbol{n}-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\boldsymbol{n}$ $\boldsymbol{l}\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{[illegible]} \sum_{(j_s = \boldsymbol{l_{sa}} + \boldsymbol{n} - D - [illegible] + 1)}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} - [illegible] + 2)} \right.
$$

$$
\sum_{j_{ik} = [illegible] j_{sa}^{ik} - 1} \sum_{(j^{sa} [illegible] - j_{sa}^{ik})}^{(\ )}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}
$$

$$
\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + [illegible] j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

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$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)} \right.$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}}^{(n_i-j_s+1)} \quad -j_s+1)$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(\quad -\mathbb{k}_2)}$$

$$\frac{(\quad - n_{is} \quad 1)!}{(j_s \quad ?)! \cdot (n_i \quad + 1)!} \cdot$$

$$\frac{(\quad - n_{ik} \quad - 1)!}{(\quad - j_s - 1)! \quad + j_s \quad - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} \quad - 1)! \quad n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\quad)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq\ \leq j^{sa}+j_{sa}^{ik}\ j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+\ -j_{sa}>\boldsymbol{l_{ik}}$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}\ -j_{sa}-1\wedge j_{sa}^{s}\ _{sa}^{ik}-1\wedge$

$\boldsymbol{s}\{j_{sa}^{s},\cdots,\mathbb{k}_1\ _{sa}^{ik},\mathbb{k}_2,j_{sa}\ \cdots,j_{sa}^{i}\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}$

$\mathbb{k}_z:z=\ \wedge\mathbb{k}=\mathbb{k}_1+\ \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}\right.$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ \ )}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-s)!}{(D+j^{sa}-\boldsymbol{n}-s)!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{\boldsymbol{l}=}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-j_{sa})}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-}$$

$$\sum_{j_{ik}=}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{+j_{sa}^{ik}-1\ (j^{}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\quad \mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(\quad=n_{ik}+j_{ik}-j^{sa}\quad)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-\quad-j_{sa}-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}-j^{sa}+j_{sa}-\quad-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\quad-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\quad)!}{(\quad^{sa}+s-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}\quad 1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+\quad \wedge j_s+j_{sa}^{ik}-1\quad j_{ik}-j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\quad j^{sa} \leq \boldsymbol{n}\quad j_{sa}-s\quad$

$\boldsymbol{l_{ik}}\quad{}_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \quad+j_{sa}^{ik}\quad{}_{sa} = \boldsymbol{l_{ik}} \wedge$

$\quad \geq \boldsymbol{n} <\quad \wedge I = \mathbb{k} > (\quad$

$j_{sa} \leq j_{ik}-1 \wedge j_{sa}^{ik}\quad{}_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$\quad > 4 \wedge s\quad s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}\right.$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)} \right.$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \boldsymbol{l} + 1)! \cdot (\boldsymbol{l} - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa} + 1)!}{(j_s + \boldsymbol{l_{ik}} - \boldsymbol{l} - 1)! \cdot (j_{ik} - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{l_{sa}})! \cdot (j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = \boldsymbol{l_s} + \boldsymbol{n} - D)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{(j^{sa} = \boldsymbol{l_s} + j_{sa} - \boldsymbol{l} + 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)$$

$$\sum_{\boldsymbol{l}=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}-j_{sa}^{ik}}\sum_{(j^{sa}=\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ )}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{sa}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-j_{sa}+1\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{sa}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}}^{(\quad -\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_s}}^{} \boldsymbol{n}-D)
$$

$$
\sum_{} (n_i - j_s
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{} \sum_{=\boldsymbol{n}+\mathbb{k}-j_s+1)}
$$

$$
n_{is} - j_{ik}-\mathbb{k}_1 \quad j^{sa}-\mathbb{k}_2)
$$

$$
\sum_{\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \quad)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \quad j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_{s}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right.\ -\mathbb{k}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-\ -j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}\ \boldsymbol{l}-1)!}{\boldsymbol{l_s}-\boldsymbol{l}+\ !\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\ )!}{(D+j^{sa}+s-\boldsymbol{n}\ -j_{sa})\ (\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l}$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{}\ j_{sa}^{ik}-1 \leq j_{ik}\ j^{sa}+j_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}\ s \wedge$

$\boldsymbol{l_{ik}}-\ ^{ik}+1 > \boldsymbol{l_s}\ _{a}+j_{sa}^{ik}-j_{sa}\ _{k} \wedge$

$D\ \boldsymbol{n} < n \wedge\ \mathbb{k} > 0$

$j_{sa}\ j_{sa}^{i}-1 \wedge j_{sa}^{ik}\ j_{sa}-1\ < j_{sa}^{ik}-1 \wedge$

$\{j_{sa}^{s},\ \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{s}\ \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s\ \mathbb{k} \wedge$

$\mathbb{k}_2\ = \ \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}\right.$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-\quad-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\quad-n_{sa}-j^{sa})!}\cdot$$

$$\frac{-1)!}{(n_{sa}+\quad-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{-j_s-\quad+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(\quad-j^{sa}-\boldsymbol{l}-\quad)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik})}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}\right.$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-$$

$$\frac{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!(\boldsymbol{n}+j_{sa}-j_{sa}-s)!}{}+$$

$$\sum_{}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{}^{}\left(\boldsymbol{n}-D\right)$$

$$\sum_{j_{ik}=\boldsymbol{l_s}}^{+j_{sa}^{ik}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = j_{ik} - j_{sa} - j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_{is} = \boldsymbol{n} + \mathbb{k}}^{n_i} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - \boldsymbol{n} + 1)}^{(n_i - \boldsymbol{n} + 1)}$$

$$\sum_{n_{is} = n_{is} + j_s - j_{sa} - \mathbb{k}_1}^{\boldsymbol{n}} \sum_{(n_{sa} - \boldsymbol{n} + 1)}^{(\ )} \sum_{(n_{sa} = j^{sa} - \mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - \boldsymbol{n} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n} - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > \boldsymbol{n} - \boldsymbol{n} + 1 \wedge$

$D \geq \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{ik}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{n_{is} - n_{ik} + \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-j}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+ -j_{sa}=\boldsymbol{l_{ik}}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa} j_{sa}-1 \wedge j_{sa}^{s} j_{sa}^{ik}-1$

$\boldsymbol{s}\{j_{sa}^{s},\cdots,\mathbb{k}_1 j_{sa}^{ik},\mathbb{k}_2,j_{sa}\cdots,j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k}$

$\mathbb{k}_z: z= \wedge \mathbb{k}=\mathbb{k}_1+ \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}\right.$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GULDUNYA

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(+j_{sa}-s)!}{(+j^{sa}-\boldsymbol{n}-)!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}\right.$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-j_{sa})}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-}$$

$$\boldsymbol{l_{sa}}\qquad +1\qquad\qquad (\quad)$$

$$\sum_{j_{ik}=\boldsymbol{n}+j_{sa}^{ik}-j_{sa}\,(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg) -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=}^{(n_i-j_s+1)} \mathbb{k}-j_s+1)$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{=n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-\right.\quad -j_{sa}-\left.\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{sa}+\quad -j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\quad)!}{+s-\boldsymbol{l_i}-\quad)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}\quad \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}$

$2 \leq j_{ik} \leq j_{ik}-j_{sa}^{ik}+\quad \wedge j_s+j_{sa}^{ik}-1\quad j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\quad j^{sa} \leq \boldsymbol{n}\quad j_{sa}-s$

$\boldsymbol{l_{ik}}\quad {}_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \quad +j_{sa}^{ik}\quad {}_{sa} = \boldsymbol{l_{ik}} \wedge$

$\geq \boldsymbol{n} < \quad \wedge I = \mathbb{k} > (\quad$

$j_{sa} \leq j_{\quad}-1 \wedge \quad {}_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \quad j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$> 4 \wedge \quad s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \right.$$

GÜDÜMYA

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}\right.$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \boldsymbol{l} + 1)! \cdot (\boldsymbol{l} - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa} + 1)!}{(j_s + \boldsymbol{l_{ik}} - \boldsymbol{l} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{l_{sa}})! \cdot (j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = \boldsymbol{l_s} + \boldsymbol{n} - D)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1)} \sum_{(j^{sa} = \boldsymbol{l_s} + j_{sa} - \boldsymbol{l} + 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{\boldsymbol{l}=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$(\boldsymbol{l_s} + j_{sa}$$

$$\sum_{j_{ik} - j_{sa}} \sum_{(j^{sa} + \boldsymbol{n} + j_{sa} - D - s)}$$

$$(\ + 1)$$

$$\sum_{n_i + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}$$

$$\sum_{n_i + j_s - j} \sum_{\mathbb{k}_1 (n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} - j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < \ \wedge \boldsymbol{l_s} > D - \ + 1 \wedge$

$D + \boldsymbol{l} + j_{sa} - \ a + 1 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$+ j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

GULDUNYA

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}\ldots+j_{sa}-\ldots-j_{sa}^{ik})}^{(\boldsymbol{l_{ik}}+j_{sa}-\ldots j_{sa}^{ik}+1)}
$$

$$
\sum_{\ldots n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(\ldots=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s\ldots)}
$$

$$
\sum_{n_{is}+\ldots j_{ik}-\mathbb{k}_1} \sum_{(\ldots n_{sa}-\mathbb{k}_2)}^{(\ldots)}
$$

$$
\sum_{n_{i\ldots}\ldots\boldsymbol{n}+\mathbb{k}_2-j_{ik}\ldots} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \ldots)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(\ldots n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \ldots j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\ldots - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_{s}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} \quad - \mathbb{k}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} \quad j_{sa}^{ik} - j_{ik} \quad j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} \quad \boldsymbol{l} - 1)!}{\quad \boldsymbol{l} + \quad ! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \quad)!}{(D + j^{sa} + s - \boldsymbol{n} \quad - j_{sa}) \quad (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l}$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j \quad j_{sa}^{ik} - 1 \leq j_{ik} \quad j^{sa} + j_{sa} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} \quad s \wedge$

$\boldsymbol{l_{ik}} - \quad ^{ik} + 1 > \boldsymbol{l_s} \quad _{sa} + j_{sa}^{ik} - j_{sa} \quad _k \wedge$

$D \quad \boldsymbol{n} < n \wedge \quad = \mathbb{k} > 0$

$j_{sa} \quad j_{sa}^{i} - 1 \wedge j_{sa}^{ik} \quad j_{sa} - 1 \quad < j_{sa}^{ik} - 1 \wedge$

$\quad \cdot \{j_{sa}^{s}, \cdots \quad _1, j_{sa}^{ik}, \mathbb{k}_2, j_{s} \quad \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s \quad \mathbb{k} \wedge$

$\mathbb{k}_2 \quad = \quad \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )} \right.$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-\quad-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\quad-n_{sa}-j^{sa})!}\cdot$$

$$\frac{-1)!}{(n_{sa}+\quad-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{-j_s-\quad1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}\quad\boldsymbol{sa}-s)!}{(\quad j^{sa}-\quad\boldsymbol{l}\quad(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik})}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}\right.$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-1)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(\boldsymbol{l}_{+}\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l}_{}^{ik}_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{\left(j^{sa}=j_{sa}-j_{sa}^{ik}\right)}^{(\ )}$$

$$\sum_{n+\mathbb{k}\ (n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i}$$

$$\sum_{=n_{is}+j_s-}^{(\ )}{}_{\mathbb{k}_1\ (n_{sa}-}{}_{sa}-\mathbb{k}_2)$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-\ -s-\ -\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\ -\mathbb{k}_2)!\cdot\left(\boldsymbol{n}\ ^{sa}+j_{sa}^{i}\ j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}\ -j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s\ -\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\ \leq n\wedge\boldsymbol{l_s}>\ -\boldsymbol{n}+1\wedge$

$D\ \boldsymbol{l_s}+j_{sa}\ -\boldsymbol{l_{sa}}\ \leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$2\leq\ \leq j_{ik}-j_{sa}^{ik}\ \wedge j_s+j\ \ 1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$\ _{ik}+j_{sa}\ j_{sa}^{ik}\leq j^{sa}\leq\ +j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\ \ \wedge\ +j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$D\ \boldsymbol{n}<\ \wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}\ \wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{ik}_{sa})}^{(\ )}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s + 1)!} \cdot
$$

$$
\frac{n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j^{ik}_{sa} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j^{ik}_{sa} + 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}
$$

$$
\sum_{j_{ik}=j_s+j^{ik}_{sa}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{ik}_{sa})}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-1)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=0 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+1 \wedge$

$\mathbb{k} \cdot z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)} \right.$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - 1)!}{(D + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\left(\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{ik}}} \sum_{j_{sa}^{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1} \right)$$

$$\sum_{j_s=\boldsymbol{l}+1}^{\boldsymbol{l_s}} \sum_{j_{sa}^{ik}=j_s+j_{sa}^{ik}}^{(\ )} \left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j^{sa}\ldots j_{sa}^{ik})}$$

$$\sum_{\ldots+\mathbb{k}}\sum_{(n_i\ldots+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}\ldots\mathbb{k}_2-j_{ik}+\ldots}^{n_{is}+j_s\ldots-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}\ldots^{a}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\ldots)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-\ldots-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \left(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2\right)$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\boldsymbol{l}+\ )!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\ )!}{(D+j^{sa}+s-\boldsymbol{n}-\ -j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l}$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{sa}^{ik}-1 \leq j_{ik}-j^{sa}+j_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s}-j_{sa}+j_{sa}^{ik}-j_{sa} > \mathbb{k} \wedge$

$D-\boldsymbol{n} < n \wedge \mathbb{k} > 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge \ < j_{sa}^{ik}-1 \wedge$

$\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s$

$\mathbb{k}_2 \geq \ \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-\quad-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\quad-n_{sa}-j^{sa})!}\cdot$$

$$\frac{-1)!}{(n_{sa}+\quad-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{-j_s-\quad+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(\quad+j^{sa}-\quad-\boldsymbol{l}\quad)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}\right.$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-1)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{\boldsymbol{l}=1}^{(\boldsymbol{l_s}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{}$$

$$\sum_{\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+1}\sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{\boldsymbol{l}=\boldsymbol{l}}^{\boldsymbol{n}}\sum_{(j_s=\boldsymbol{l}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{sa}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l_{sa}})}\sum_{(j_{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l_{sa}})}$$

$$\sum_{n_i=n_{is}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1)}$$

$$\sum_{n_{ik}=n_{ik}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum^{(n_i-j_s+1)}_{(n_{is}=\ \mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(\ =n_{ik}+j_{ik}-j^{sa}-}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{sa}-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(j_s-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\ )!}{(D+j^{sa}+s-\ -\boldsymbol{l_i}-\ )!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}+1 \leq \boldsymbol{l}+D-\boldsymbol{n}+1$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa}+\boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}} \leq j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge j^{sa}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{n} \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{s} \leq j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge s = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{j^{sa}+1)}$$

$$\frac{(n_i}{(j_s-2)!\cdot(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}}{(j_{ik}-j_s-1}$$

$$\frac{(n_{ik}-n_{sa}-}{(j^{sa}-j_{ik}-1)!\cdot(}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{ik}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} >$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} -$ $\wedge j_{sa}^{s} < j_{sa}$ $1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots,$ $\wedge$

$s > 4 \wedge \boldsymbol{s} = s +$ $\wedge$

$\mathbb{k} \cdot z = 2 \wedge$ $= \mathbb{k}_1 +$ $\Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \right.$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!}$$

$$\frac{(\quad \boldsymbol{l} - 1)}{(\boldsymbol{l_s} - \quad - \boldsymbol{l} + 1) \quad - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} \quad)!}{(D + j^{sa} - \boldsymbol{n} \quad (\boldsymbol{n} + j_{sa} \quad - j^{sa} - s)!)}$$

$$\left(\sum_{k=\boldsymbol{l}}^{\quad ik_{sa}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)} \right.$$

$$\sum_{\quad j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \quad \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \quad \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \quad \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{j_{ik}=\boldsymbol{l}}^{(j_{ik}-k+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D}$$

$$\boldsymbol{l_{sa}} + j_{sa} \quad j_{sa}-1 \quad (j_{sa}-\boldsymbol{l}+1)$$

$$j_{ik}=\boldsymbol{l_{ik}} \quad D \quad (j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$s - j_{ik} - \mathbb{k}_1 \quad (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\qquad\sum^{(\boldsymbol{l_{sa}}}$$

$$\sum^{(n_i-j_s+1}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}\sum^{\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{n_{is}+j_s-\mathbb{k}_1}^{n_{ik}-\mathbb{k}_1}\sum^{a-\mathbb{k}_2)}$$

$$\sum_{n_{ik}+\mathbb{k}_2-j_{ik}+1}^{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-1)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}+j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1}^{j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+ -j_{sa} > \boldsymbol{l_{ik}}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa} j_{sa}-1 \wedge j_{sa}^{s} j_{sa}^{ik}-1$

$\boldsymbol{s} \{j_{sa}^{s},\cdots,\mathbb{k}_1 j_{sa}^{ik},\mathbb{k}_2,j_{sa}\cdots,j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k}$

$\mathbb{k}_z : z = \wedge \mathbb{k} = \mathbb{k}_1+ \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}\right.$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜNYA

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 1)!}{(j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - s)!}{(D + j^{sa} - \boldsymbol{n} - s)! \cdot (\boldsymbol{n} - j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{sa}}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-1)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-D)!}+$$

$$\sum_{k}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}\sum_{\boldsymbol{n}-D)}$$

$$\sum_{=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l}_{i}+1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}\ldots)}^{(\boldsymbol{l_{sa}}\ldots 1)}$$

$$\sum_{\ldots\boldsymbol{n}+\mathbb{k}} \sum_{(n_i\ldots\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}\ldots+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s\ldots-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}\ldots-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - \ldots)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - \ldots - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(\ldots^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\left.\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\right) -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

GÜLDÜNYA

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\boldsymbol{l}+\ )!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\ )!}{(D+j^{sa}+s-\boldsymbol{n}-\ -j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j^{ik}_{\ } \leq j_{ik} \leq j_{\ }+j_{sa}^{ik}-j_{\ } \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-\ > \boldsymbol{l_{ik}} \wedge \boldsymbol{l}\ j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \ < n \wedge I=\ 0 \wedge$

$j_{s}^{\ } \leq j_{sa}^{i}-1\ j_{\ }^{ik}=j_{sa}\ 1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{\ \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2\ a, \cdots, j_{s}\ \}$

$> 4 \wedge\ - s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}\ \ _2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(j_s - \boldsymbol{l} - 1)!}{(j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-1)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{}$$

$$\sum_{}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}$$

$$\sum_{}^{}{}_{+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} \ldots +1)}^{\ldots)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s} \ldots + j_{sa}^{ik} - D - 1}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{\ldots + \boldsymbol{n} - D)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}
$$

$$
\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j \ldots ik - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_{\cdot}-n_{is}-1)!}{(j_s-2)!\cdot(n_{i}-j_s+1)!}\cdot$$

$$\frac{n_{ik}-\mathbb{k}_1-1)!}{j_{ik}-j_s-1)!\,n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}\,n_{sa}-1)!}{(j^{sa}\,j_{ik}-1)!\,n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (\ - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l} - j_{sa})! \cdot (\boldsymbol{n} - j_{sa} - j^{sa} -}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{ik} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} - j_{sa} - s = \ \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = \ + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GULDUNYA

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(\boldsymbol{l_{ik}}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - 1)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(\boldsymbol{l_i} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(\boldsymbol{l_i} - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\boldsymbol{n} > \boldsymbol{n} - 1 \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{\boldsymbol{l}=\boldsymbol{l}}^{\boldsymbol{l}_{ik}-j_{sa}^{ik}+1} \sum_{(j_s=\boldsymbol{l}+\boldsymbol{n}-D)}^{\boldsymbol{l}_s+j_{sa}^{ik}-\boldsymbol{l}} \sum_{j_{ik}=\boldsymbol{l}_s-D-j_{sa}}^{(\quad)} \sum_{(\quad)}^{j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{(\quad)}^{(\quad+1)} \sum_{n_i=}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{\mathbb{k}} \sum_{n_{is}+j_{ik}-\mathbb{k}_1}^{j_{ik}-\mathbb{k}_1} \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_{ik}=}^{2-j_{ik}+1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(\quad)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(\quad_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-n_{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{i\mathbb{k}} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot$$

$$\frac{n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}$ $_{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j$ $=\boldsymbol{l_{ik}}\wedge\boldsymbol{l}$ $j_{sa}-s=$ $\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge$ $_{sa}^{s}<j_{sa}^{ik}-1$

$\boldsymbol{s}$: $\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},$ $j_{sa},\cdots,j_{sa}^{i}\}\wedge$

s $4\wedge\boldsymbol{s}=$ $\mathbb{k}\wedge$

$\mathbb{k}_z$ $=2\wedge\mathbb{k}=\mathbb{k}$ $+\mathbb{k}_2\Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜNYA

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 1)!}{(j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{sa}^{ik} - \boldsymbol{l_s})! \cdot (\quad - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=l}^{(l_s-l+1)}\sum_{(-j_{sa}+1)}$$

$$\sum_{j_{ik}+j_{sa}^{ik}-1}^{(\ )}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$>\boldsymbol{n}-\ \wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$2\le j_s\le j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

GÜLDÜNYA

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{\boldsymbol{l}_{ik}=\boldsymbol{l}}^{\boldsymbol{l}_{ik}+\boldsymbol{n}-D} \sum_{\boldsymbol{l}_{sa}=\boldsymbol{l}_{sa}+\boldsymbol{n}-D}^{\boldsymbol{l}_{sa}+\boldsymbol{n}-D} \sum_{n_{ik}=\boldsymbol{n}-j_{ik}+1}^{n} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1}^{n_i+\mathbb{k}} \sum_{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{n_{is}+j_{ik}-\mathbb{k}_1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

GÜLDÜNYA

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\quad+1)}^{(n_{i}\quad+1)}$$

$$\sum_{n_{ik}-\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1}$$

$$\frac{(n_{is}-1)!}{(j_s-2)!\cdot(\quad-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\quad-\mathbb{k}_1-1)!}{(j_{ik}-\quad-1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

GÜLDÜNYA

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} \quad - \mathbb{k}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - \quad j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} \quad \boldsymbol{l} - 1)!}{\boldsymbol{l_s} \quad - \boldsymbol{l} + \quad ! \cdot (j_s - 2)!}$$

$$\frac{(D - \quad)!}{(D + j^{sa} + s - \boldsymbol{n} \quad - j_{sa}) \quad (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j^{ik} \quad \leq j_{ik} \leq \quad + j_{sa}^{ik} - j \quad \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} \quad j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad > \boldsymbol{l_{ik}} \wedge \boldsymbol{l} \quad j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \quad < n \wedge I = \quad 0 \wedge$

$j_s \leq j_{sa}^{i} - 1 \quad = j_{sa} \quad 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{ \quad \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2 \quad , \cdots, j_s \quad$

$\quad > 4 \wedge \quad \leq s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} \quad \mathbb{k} \quad = \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

GULDUNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-\cdots-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\cdots-n_{sa}-j^{sa})!}\cdot$$

$$\frac{-1)!}{(n_{sa}+\cdots-\boldsymbol{n}-1)!\cdot(\cdots-j^{sa})!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{(\cdots-j_s-\cdots+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\cdots-j_{sa}^{ik}+1)!}{(\cdots+\boldsymbol{l_{ik}}-\cdots)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{sa} - j_{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(j_s + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j_s + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = \boldsymbol{l_{sa}} + \boldsymbol{n} - D - j_{sa} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(\ )} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(\ )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

GÜLDÜNYA

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j_{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )} $$

$$ \sum_{j_{ik} = \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} $$

$$ \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} $$

$$ \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot $$

$$ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot $$

GÜLDÜNYA

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{l_{sa}} - D - s)}$$

$$\sum^{n} \sum^{(n_i \quad +1)}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \quad +1)}$$

$$\sum^{(\ )} \sum$$

$$\sum_{=n_{is}+j_s} \sum_{-\mathbb{k}_1 (n_{sa} \quad j^{sa} - \mathbb{k}_2)}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} \quad j_{ik} - s - \quad - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} \quad \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} \quad j^{sa} + j_{sa} \quad j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} \quad j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + \quad - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > \quad - \boldsymbol{n} + 1 \wedge$

$2 < j_s \leq j_{ik} \quad {}^{ik}_{sa} + 1 \wedge \quad + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} \quad j_{sa} - j_{sa}^{ik} \leq j \quad \leq \boldsymbol{n} + j \quad \wedge$

$\boldsymbol{l_{ik}} - j_{sa} \quad 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} \quad j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge \quad = \mathbb{k} > \quad \wedge$

$j_{sa} \quad j_{sa}^{s} \quad 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \quad , j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

GULDUNYA

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_{s}+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}+j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

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$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{(j^{sa} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa} - D - 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{}\ (j_s=j_{ik}-j_{sa}^{}$$

$$+j_{sa}-\boldsymbol{l})$$

$$\sum_{=j^{sa}+j_{sa}}\ (j^{sa}=\boldsymbol{l_i}+$$

$$-D-s)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\ (n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)$$

$$\sum_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ \ )}\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)$$

$$\frac{(\ \ +j^{sa}\ \ j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\ \ -\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\ \ m\wedge \boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\le j_s\le j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}\ \ a-j_{sa}^{ik}\le j^{sa}\le \boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\ge\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\le j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} +} ^{(\ \ )}
$$

$$
\sum_{j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}}^{\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l} - j_{sa} + 1} \sum_{(\ \ \ \

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}$ $-j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j$ $=\boldsymbol{l_{ik}}\wedge\boldsymbol{l}$ $j_{sa}-s>$ $\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge$ $<j_{sa}^{ik}-1$

$\boldsymbol{s}$: $\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},$ $j_{sa},\cdots,j_{sa}^{i}\}\wedge$

s $4\wedge\boldsymbol{s}=$ $\mathbb{k}\wedge$

$\mathbb{k}_z$ $=2\wedge\mathbb{k}=\mathbb{k}$ $+\mathbb{k}_2\Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - 1)! \cdot (\boldsymbol{n} -)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 1)!}{(j_s - 2)!} \cdot$$

$$\frac{D + j_{sa} -)!}{(D + j^{sa} - \boldsymbol{n} -)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

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$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{sa} = j_{sa} - j_{sa} = \sum_{\boldsymbol{l}} \sum_{(j_s = j_{sa} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_s} + \boldsymbol{n} - j_{sa}^{ik} - D - 1}^{\boldsymbol{l_s} + j_{sa}^{ik} - \ldots} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{}}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(\ =n_{ik}+j_{ik}-j^{sa}-1}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j^{}-\mathbb{k}-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{sa}+j_{sa}^{ik}-j^{}-j_{sa}\right)!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{-j_s-1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-)!}{(D+s-\boldsymbol{l_i}-)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+\wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq a+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa}+\boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}<\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D \geq \leq n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_s-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}:\{j^{s}, \mathbb{k}_1, j_{sa}^{}-2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}+\mathbb{k} \wedge$

$z=\wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

GUDUMYA

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \left(n_{sa}=\right.$$

$$\frac{(n_i$$

$$\frac{(n_{i$$

$$\frac{(n_{ik}$$

$$\frac{(n_{sa}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 2)} \sum_{(j_s = \boldsymbol{l_{ik}} + \boldsymbol{n} - D - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(\ )} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

GÜLDÜNYA

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-$$

$$\sum_{k=1}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+2)}$$

$$\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-s+1)}$$

$$\sum_{=j_s+j_{sa}^{ik}-1}\ \sum_{=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{j_s+1)}$$

$$\sum_{+\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{-n_{is}+j_s-j_{}+\mathbb{k}_1}\ \sum^{(\ \ )}_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(-\boldsymbol{n}-\mathbb{k}_1-_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\geq \boldsymbol{n} < \wedge \boldsymbol{l_s} > D - + 1 \wedge$

$2 \leq j_{} \leq j_{ik} - j_{}^{ik} + \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad _{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

GÜLDÜNYA

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{j_{ik}+1}^{n_{is}+j_s-j_{ik}-1} \sum_{(n_{ik}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is}}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is} \quad n_{ik}-\mathbb{k}_1-1)!}{(j_{ik} \quad j_s-1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n \quad -n_{sa}-1)!}{{}^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

GÜLDÜNYA

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-1)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}_z>0\wedge$

$j_s\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_s\}$

$>4\wedge\boldsymbol{n}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}_1=\mathbb{k}_2\Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

GULDUNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(j_s - \boldsymbol{l} - 1)!}{(j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + \boldsymbol{l})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{ik}-j^{sa}+j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}})!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{j_s=2}^{\boldsymbol{l_s}-\boldsymbol{l}}\ \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\ \sum_{j^{sa}=j_{ik}+j_{sa}^{ik}-j_{sa}}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{n_{is}=n_i-j_s+1}^{\boldsymbol{n}+\mathbb{k}-j_s+1}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}\ \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{s}_{j_{ik}, j^{sa}} = \sum_{k=l} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{i} - D - j_{sa} - 1} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{\boldsymbol{l_{ik}}=\boldsymbol{l}}\sum_{(j_s=j_{ik}+j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}-j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j_s=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{n_i-\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{ik}}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{=n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j \quad j_{sa} - \mathbb{k} \quad \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa} \quad - j_{sa}\right)!} \cdot$$

$$\frac{\boldsymbol{l_{ik}} - \boldsymbol{l} - 1)!}{- j_s - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D -)!}{(D + s - \boldsymbol{l_i} -)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} \quad 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \quad 1 \leq j_{ik} \leq \quad a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad ^{ik} \leq j^{sa} \quad \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \quad \wedge \boldsymbol{l_{sa}} + \quad - j_{sa} \quad \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \quad < n \wedge \boldsymbol{l_s} > D \quad \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j \quad - j_{sa}^{ik} + 1 \wedge \quad s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \quad - j_{sa}^{ik} \leq j \quad \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}\big) \wedge$

$\quad n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \quad \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \quad \sum_{(\boldsymbol{n}+\mathbb{k}}^{(j_s+1)}
$$

$$
\sum_{}^{n_{is}+j_s-j_{ik}} \quad \sum_{(n_{ik}+j_{ik}-j^{sa}}^{(\ )}
$$

$$
\sum_{+1}^{} \quad \sum_{(\boldsymbol{n}-j^{sa}+1)}^{}
$$

$$
\frac{(n_i - n_{is}}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is} - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \quad \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(j_s - \boldsymbol{l} - 1)!}{(j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}}) \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge$ [illegible] $-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa},$ [illegible] $\} \wedge$

$s > 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k}=\mathbb{k}_1 \cdots \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}\sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \boldsymbol{l} + 1)! \cdot (\boldsymbol{l} - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{l_{sa}})! \cdot (D + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 2)} \sum_{(j_s = \boldsymbol{l_{sa}} + \boldsymbol{n} - D - j_{sa} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{\boldsymbol{l_i}=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+2)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-s+1)}$$

$$\sum_{j_s+j_{sa}^{ik}-1}^{(\ )}\sum_{(j_{ik}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ )}$$

$$\sum_{n_{is}=n_{is}+j_s-j_{sa}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$j_{ik}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, \dots} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} + \dots D - j_{sa})} \sum_{(j_s = \boldsymbol{l_s} + \dots)}
$$

$$
\sum_{\dots}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{j_s + j_{sa}^{ik} - 1 \dots (\dots \boldsymbol{n} - D)}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}
$$

$$
\sum_{n_{is} + j_{\dots} \dots_{ik} - \mathbb{k}_1}^{} \sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}
$$

$$
\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 + j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} + j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} + n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = D > 0 \wedge$

$j_{sa}^{s} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}\}$

$n > 4 \wedge \boldsymbol{n} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-\ -1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\ -n_{sa}-j^{sa})!}\cdot$$

$$\frac{-1)!}{(n_{sa}+\ -\boldsymbol{n}-1)!\cdot(\ -j^{sa})!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{(\ -j_s-\ +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\ -j_{sa}^{ik}+1)!}{(\ +\boldsymbol{l_{ik}}-\ -\boldsymbol{s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+\ -\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa} - 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s} - j_{sa})! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} -)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} -)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} - j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

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$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\Big) \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{j_{ik}, j^{sa}} \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = \boldsymbol{l_s} + \boldsymbol{n} - D)}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_s} \; - \boldsymbol{l}} \sum_{\left(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}\right)}^{(\quad)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = \boldsymbol{l}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}} \sum_{(j_{ik}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{ik}+1)}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=n_{ik}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{is}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1)}^{(\ )}$$

$$\frac{(n_i+j_{sa}^{ik}+j_{sa}^{ik}-j_{sa}-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{sa}^{ik}+j_{sa}^{ik}-j_{sa}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{n})!}{(D+j_{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-\boldsymbol{l_s})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

GÜLDÜNYA

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{\boldsymbol{n}+}^{(\ \ j_s+1)}
$$

$$
\sum_{n_{is}+j_s-j_{ik}}^{n_{is}+j_s-j_{ik}} \sum_{(n_{ik}+j_{ik}-j^{sa})}^{(\ \ )}
$$

$$
\sum_{\ \ +1}^{\ \ +1} \sum_{(\ \ -j^{sa}+1)}^{(\ \ -j^{sa}+1)}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} \ \ _{ik} - \mathbb{k}_1 \ \ 1)!}{(j_{ik} \ \ j_s - 1)! \cdot (n_{i} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n \ \ - n_{sa} - 1)!}{(\ \ _{a} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1)!}{(\boldsymbol{l_{sa}}+\boldsymbol{l_{ik}}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge$ $^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa},$ $^{ii}_{sa}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z$ $2 \wedge \mathbb{k} = \mathbb{k}_1$ $\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = \boldsymbol{l_s} + \boldsymbol{n} - D)}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \boldsymbol{l} + 1)! \cdot (\boldsymbol{l} - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa} + 1)!}{(j_s + \boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(j_{sa} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-\boldsymbol{l_i})!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=1}^{n}\sum_{(j_{sa}=j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}-j_{sa}}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(\boldsymbol{l_i}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$(\ \ < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \le j_s \le j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \le j_{ik} \le j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}) \vee$

GÜLDÜNYA

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+\boldsymbol{n}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - \boldsymbol{l}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=}^{} \cdot$$

$$\sum_{j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}} \sum_{(}^{(\boldsymbol{l_{sa}}} \cdot$$

$$\sum_{n_i}^{n} \sum_{+\mathbb{k}}^{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)} \cdot$$

$$n_{is}+ \quad j_{ik}-\mathbb{k}_1 \quad (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \cdot$$

$$n_{ik}=\boldsymbol{n} \quad -j_{ik}+1 \quad (n_{sa}=\boldsymbol{n}-j^{sa}+1) \cdot$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{k - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

GÜLDÜNYA

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+1)}^{(n_i+1)}$$

$$\sum_{n_{is}=n_{is}+j_s-j_{sa}-\mathbb{k}_1}\sum_{(n_{sa}=n_{is}+j_s-j_{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-j_{sa}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

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$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\cdots}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_s}\cdots\boldsymbol{n}-D)}^{(\cdots-\boldsymbol{l}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}\cdots}^{\cdots} \sum_{\cdots=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s\cdots}
$$

$$
\sum_{\cdots\boldsymbol{n}+\mathbb{k}_2-j_{ik}\cdots}^{n_{is}\cdots j_{ik}-\mathbb{k}_1\cdots} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{\cdots j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \cdots)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(\cdots n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \cdots j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\cdots - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-\text{[illegible]})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\text{[illegible]}\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}\text{[illegible]}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1\text{[illegible]}} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+\text{[illegible]}}^{\text{[illegible]}+j_{ik}-\text{[illegible]}^{a}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(\text{[illegible]}-j_s+1)!}\cdot$$

$$\frac{\text{[illegible]}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \geq \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D+j_{sa}-\boldsymbol{n} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{s} \leq j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s} \leq \left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\} \wedge$

$s>1 \wedge \boldsymbol{s}=s+\mathbb{k}$

$\mathbb{k}_z: z=\ \wedge \mathbb{k}=\mathbb{k}_1+\ \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{j_{ik}=j_{sa}^{ik}+1}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\ \sum_{(j^{sa}=j_{sa}+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GULDUNYA

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l})!\cdot(j^{sa}-j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - 1)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\ )} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(\boldsymbol{l_i} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(\boldsymbol{l_i} - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\boldsymbol{n} \leq \boldsymbol{n} + \boldsymbol{l} \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

GÜLDÜNYA

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} \ldots +1)}^{\ldots)}
$$

$$
\sum_{\ldots = j_{sa}^{ik}+1}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j \ldots - j_{sa}^{ik})}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}
$$

$$
\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j \ldots_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{}}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\ \ \mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(\ \ n_{ik}+j_{ik}-j^{sa}-\ }$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{\ \ }-\mathbb{k}_{\ \ }-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_{\ \ })!\cdot\left(\boldsymbol{n}+j_{\ \ }^{sa}+j_{sa}^{ik}-\ \ -j_{sa}\right)!}\cdot$$

$$\frac{(\ \ -\boldsymbol{l}-1)!}{-j_s-\ \ +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\ \ )!}{(D+\ \ +s-\ \ -\boldsymbol{l_i}-\ \ )!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq\ \ -\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{\ \ }^{ik}+1 \wedge j_s+j_{sa}^{ik}\ \ 1 \leq j_{ik} \leq\ \ ^{a}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-\ \ ^{ik} \leq j^{sa}\ \ \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\ \ \wedge \boldsymbol{l_{sa}}+j_{\ \ }-j_{s}\ \ \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq\ \ +j_{sa}-\boldsymbol{n} \wedge\ \ \leq D+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} <\ \ I=\mathbb{k}>(\ \ \wedge$

$j_{sa} \leq\ \ -1 \wedge j_{sa}\ \ -j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}\ \ j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\} \wedge$

$\ \ \ =s+\mathbb{k} \wedge$

$\mathbb{k}_z\colon z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

GULDUNYA

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{i}-n_{ik}-\mathbb{k}_{}-1)!}{(j_{ik}-j_s-1)!\cdot(}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l}+\boldsymbol{l}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

GÜLDÜNYA

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < {}_{a}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )} \right.$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\left. \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \right)$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\boldsymbol{l}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{sa}}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+1}^{j_{sa}-1}\sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n_{is}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{n_{is} - n_{ik} + \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=j_{sa}+1)}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-}$$

$$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{l}$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{ik}\geq\boldsymbol{l_{ik}}\wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1$$

$$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\ldots j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$$

$$s\ldots4\wedge\boldsymbol{s}=\ldots\mathbb{k}\wedge$$

$$\mathbb{k}_z\ldots=2\wedge\mathbb{k}=\mathbb{k}_1\ldots\mathbb{k}_2\Rightarrow$$

$$_{fz}S_{j_s,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}\right.$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\ \sum_{(j^{sa}=j_{sa}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜNYA

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 1)!}{(j_s - 2)!} \cdot$$

$$\frac{(\quad + j_{sa} - \quad - s)!}{(D + j^{sa} - \boldsymbol{n} - \quad)! \cdot (\boldsymbol{n} - j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{} \right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{\boldsymbol{l}=\boldsymbol{l}}^{\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ldots)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(j_{sa}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n_i}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

GÜLDÜNYA

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(\boldsymbol{l_s} + j_{sa}} \sum_{=j_{sa}+1)}$$

$$\sum^{n} \sum^{(n_i}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}^{} \sum_{(n_{is} = \boldsymbol{n}+\mathbb{k}}^{+1)}$$

$$\sum^{(\ )} \sum$$

$$\sum_{=n_{is}+j_s-\mathbb{k}_1}^{} \sum_{(n_{sa}}^{;sa}-\mathbb{k}_2)$$

$$\frac{(n_i + j^{sa} + j_{sa}^{ik} - s - \quad - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_2)! \cdot (\boldsymbol{n}^{isa} + j_{sa}^{} - j_{ik} - s - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} \quad j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + \quad \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \quad < n \wedge \boldsymbol{l} \neq \quad \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} \quad \boldsymbol{n} \wedge$

$1 \quad j_s \leq j_{ik} \quad {}^{ik}_{sa} + 1 \wedge \quad + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} \quad j_{sa} - j_{sa}^{ik} \leq j \quad \boldsymbol{n} + j_{sa} \quad \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{i} \quad 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} \quad j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge \quad \mathbb{k} > \quad \wedge$

$j_{sa} \quad j_{sa}^{i} \quad 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots \quad , j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \right.$$

GULDUNYA

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}-l+1}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} + n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + \boldsymbol{n} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{ik}-l+1}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}-l+1}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}-l+1})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-1)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_i}+j_{sa}-s)!}\Bigg)$$

$$\sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{\boldsymbol{l}}\ \sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l}-\boldsymbol{l}+1}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{\left(\ \right)} \sum_{(j_s = j_{ik} \ldots +1)}^{\left(\ \right)} \right.
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j \ldots -j_{sa}^{ik})}^{(\ )}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j \ldots_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

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$$\left(\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}\right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{j_{ik}-}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-j_s+1)!}\cdot$$

$$\frac{-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}_{\boldsymbol{s}}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} -$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - \ldots > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge \ldots < j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{s_a}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \ldots j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ldots 4 \wedge \boldsymbol{s} = \ldots \mathbb{k} \wedge$

$\mathbb{k}_z \ldots = 2 \wedge \mathbb{k} = \mathbb{k}_1 \ldots \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}\ \sum_{(j_s=2)}\right.$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-s)!}{(D+j^{sa}-\boldsymbol{n}-s)!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}\ \sum_{(j_s=2)}\right.$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)$$

$$\sum_{j_{ik}=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}\sum_{(j_s=2)}^{(\ )}$$

$$\sum_{j_{ik}=j_s-j_{sa}^{ik}-1}^{(\ )}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n_i}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}
$$

$$
\sum_{(n_i=j_s)} \sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}
$$

$$
n_{is}+ \quad j_{ik}-\mathbb{k}_1 \quad (\quad ,sa}-\mathbb{k}_2)
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \quad)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(\quad n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \quad j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-\ \ -1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\ \ -n_{sa}-j^{sa})!}\cdot$$

$$\frac{-1)!}{(n_{sa}+\ \ -\boldsymbol{n}-1)!\cdot(\ \ -j^{sa})!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{(\ \ -j_s-\ \ +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}\ \ \boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}\ \ \boldsymbol{l_{sa}}-j\ \ \boldsymbol{l}\ \ (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{s}\ \ -\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{k} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )} \right.$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{}-s)!}\Bigg)$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{}\ \sum_{(j_s=j_{ik}-j_{sa}^{}}$$

$$\sum_{j_{ik}=j_s}^{j_{sa}-1}\ (\boldsymbol{l_{ik}}_{a}-\boldsymbol{l}-j_{sa}^{ik}+1)$$

$$\sum_{j_{ik}=j_s}^{}\ (j^{sa}=\boldsymbol{l_{sa}}-\boldsymbol{n}-D)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{}^{j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{n_{is} - n_{ik} + \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}-1)!\cdot(\ \ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{sa} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-1 \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \boldsymbol{l} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}+1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{\mathbb{k}_1, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}\}$

$s > 4 \wedge \boldsymbol{n} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}_z = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(j_s - \boldsymbol{l} - 1)!}{(j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} - \boldsymbol{l_{sa}} - j_{sa}^{ik} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{k}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2$

$$fzS_{j_s,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\right)$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}-j_{sa}^{ik})}^{}\right.$$

$$\sum_{j_{ik}-j_{sa}-1}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{j_{ik}-j_{sa}+1}^{(j^{sa}-j_{sa}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

GÜLDÜNYA

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_{\cdot}-n_{is}-1)!}{(j_s-2)!\cdot(n_i-\quad j_s+1)!}\cdot$$

$$\frac{n_{ik}-\mathbb{k}_1-1)!}{j_{ik}-j_s-1)!\,n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}\quad n_{sa}-1)!}{(j^{sa}\quad _{ik}-1)!\,n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (\ - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l} - j_{sa})! \cdot (\boldsymbol{n} - j_{sa} - j^{sa} -}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} + 1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq \ \leq j^{sa} + j_{sa}^{ik} \ \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + \ - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + \ - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \ > 0 \wedge$

$j_s \leq j_{sa}^{i} - 1 \ {}_{sa}^{ik} = j_{sa} \ 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{ \ , \cdots, \mathbb{k}_1, j_{sa}^{ik}, \ \ j_{sa}, \cdots, j_{\ } \}$

$\ > 4 \wedge \ = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} \ \mathbb{k}_1 + \ _2 \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

GULDUNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-\quad-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\quad-n_{sa}-j^{sa})!}\cdot$$

$$\frac{-1)!}{(n_{sa}+\quad-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{-j_s-\quad+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}\quad\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}\quad\boldsymbol{l_{sa}}-j\quad\boldsymbol{l}\quad)!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j\quad-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{k} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$fzS_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )} \right.$$

$$\sum_{j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)$$

$$\left(\sum_{k=\boldsymbol{l}}^{(}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}$$

$$\sum_{j_{ik}=\boldsymbol{n}+j_{sa}^{ik}-}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \quad \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\ \mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_{\cdot}-n_{is}-1)!}{(j_s-2)!\cdot(n_i-\ j_s+1)!}\cdot$$

$$\frac{n_{ik}-\mathbb{k}_1-1)!}{j_{ik}-j_s-1)!\cdot n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}\ n_{sa}-1)!}{(j^{sa}\ _{ik}-1)!\cdot n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-j}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq \ \leq j^{sa}+j_{sa}^{ik}\ _{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}\ \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+\ -j_{sa} > \boldsymbol{l_{ik}}$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+\ -\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \ > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1\ j_{sa}^{ik}=j_{sa}\ -1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \ j_{sa}, \cdots, j\ \}$

$s > 4 \wedge \ = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}\ \mathbb{k}_1+\ \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{(\ \ )}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (j^{sa} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(\boldsymbol{n} + j^{sa} - \boldsymbol{l} - \boldsymbol{n} + j_{sa} - j^{sa} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}\right.$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-1)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{\boldsymbol{l}=\boldsymbol{l_{sa}}}^{(\ )}\sum_{(j_{sa}=\boldsymbol{l_{sa}}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{n}+\boldsymbol{n}+j_{sa}^{ik}-\boldsymbol{l_{sa}}-j_{sa}-1}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = j_{ik} - j_{sa} - j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_{is} = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - \boldsymbol{n} + 1)}^{(n_i - \boldsymbol{n} + 1)}$$

$$\sum_{j_{ik} = n_{is} + j_s - j_{sa} - \mathbb{k}_1}^{n} \sum_{(n_{sa} - \mathbb{k}_1 - \mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - \boldsymbol{n} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \boldsymbol{l_i} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + \boldsymbol{l_i} \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \wedge$

$1 \leq \boldsymbol{l_s} \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$\boldsymbol{l_{ik}} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{l_{ik}} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_{ik}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\quad)} \sum_{(j^{sa}=j_{ik}+j_{sa}-}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(\quad -\mathbb{k}_2)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}
$$

$$
\frac{-n_{is}-1)!}{(j_s \quad)! \cdot (n_i \quad +1)!} \cdot
$$

$$
\frac{(\quad -n_{ik} \quad -1)!}{(\quad -j_s-1)! \quad +j_s \quad -j_{ik}-\mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} \quad n_{sa}-1)!}{(j^{sa} \quad -1)! \quad (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)! \cdot (j_s-2)!} \cdot
$$

$$
\left. \frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})! \cdot (\boldsymbol{n}+j_{sa}-j^{sa}-s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 1)!}{(j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - j_{sa})! \cdot (j^{sa} - j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\ldots}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\ldots-j_{sa}\right)!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-\ldots}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\ldots+j_{sa}-j^{\ldots})!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}\ldots}\sum_{\ldots(D-s+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=\ldots j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\ldots_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(\ldots-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\ldots\boldsymbol{n}\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}+1\leq\boldsymbol{l}\leq\ {}_{\boldsymbol{i}}\boldsymbol{l}-1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}} \sum_{\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l}_s - \boldsymbol{l} + 1)} \sum_{j_{ik}=j_s}^{j_{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l}_s - \boldsymbol{l} + 1)} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\quad)}\sum_{(j^{sa}=j_{sa}-j_{sa}^{ik})}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+}^{(n_i+1)}$$

$$\sum_{n_{is}=n_{is}+j_s}^{(\quad)}\sum_{-\mathbb{k}_1\ (n_{sa}}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-s-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j^{sa}+j_{sa}-j_{ik}-s-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+j-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n} \wedge$

$2 \leq \boldsymbol{l} \leq D+ + j_{sa} - - \boldsymbol{l_{sa}} \wedge$

$1 \leq \leq j_{ik} - j_{sa}^{ik} \wedge j_s + \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \wedge + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \quad j_{sa} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < \quad I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{i\mathbb{k}} - 1)!}{(j_s - 2)! \cdot (\quad - j_s + 1)!} \cdot
$$

$$
\frac{\quad - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-1)!\cdot(j^{sa}-j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}\ \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - \quad)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - \quad - j_{sa}\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - \quad}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\quad + j_{sa} - j^{\quad})!}\Big) -$$

$$\sum_{k=} \sum_{\boldsymbol{l}_{\boldsymbol{s}}=\boldsymbol{l}+1}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(D-s+1)}$$

$$\sum_{j_{ik}=\quad + j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(\quad + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(\quad - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\quad \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}} \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

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$\boldsymbol{l_{ik}} \le D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \le D + s - \boldsymbol{n} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{\cdots}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{\cdots} - j_{sa}^{ik}+1)} (\cdots)
$$

$$
\sum^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \cdots \sum^{(j^{sa}+j_{sa}-j_{sa}+1)} \cdots
$$

$$
\sum^{(n_i-j_s+1)} \cdots \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)} \cdots
$$

$$
\sum^{n_{is}+j_{\cdots}-\mathbb{k}_1} \cdots \sum^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \cdots
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{} \cdots \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{} \cdots
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s + 1)!} \cdot$$

$$\frac{n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=j_{sa}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D+j_{sa}^{ik}-\boldsymbol{n} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+1 \wedge$

$\mathbb{k}_1 z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1+1 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \boldsymbol{l} + 1)! \cdot (\boldsymbol{l} - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa} + 1)!}{(j_s + \boldsymbol{l_{ik}} - \boldsymbol{l} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{l} - \boldsymbol{l_{sa}})! \cdot (D + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l} + 1}^{\boldsymbol{l_{sa}} - j_{sa} - \boldsymbol{l} - j_{sa} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{\boldsymbol{l_{ik}}=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\sum_{(j_s=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(j_s=j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{sa}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq{}_{\boldsymbol{i}}\boldsymbol{l}\wedge j_{sa}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_{sa}\leq j_{ik}-j_{sa}-1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$j_{sa}+j_{sa}^{ik}-1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_{ik}}\leq D+j_{sa}^{ik}-\boldsymbol{n}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

GÜLDÜNYA

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(\boldsymbol{n}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}-j_{sa})}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_i=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s)}
$$

$$
\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{is}+j_{ik}-\mathbb{k}_1 \quad (\boldsymbol{n}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

GÜLDÜNYA

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\boldsymbol{l}+\ )!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\ )!}{(D+j^{sa}+s-\boldsymbol{n}-\ -j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} -$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s +$ $\leq j_{ik} \leq$ $+ j_{sa}^{ik} - j$ $\wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}$ $_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} -$ $= \boldsymbol{l_{ik}} \wedge$

$D \geq$ $< n \wedge I =$ $0 \wedge$

$j_{sa}^{s} \leq j_{sa}^{i} - 1 \wedge$ $= j_{sa}$ $1 \wedge j_{sa}^{s} <$ $- 1 \wedge$

$\boldsymbol{s}$: $\{$ $\cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2$ $, \cdots, j_{sa}$

$> 4 \wedge$ $s + \mathbb{k} \wedge$

$\mathbb{k}_z$: z $2 \wedge \mathbb{k}$ $\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}\right.$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j_{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(j_{ik} - \boldsymbol{l} - 1)!}{(j_{ik} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l} - s)!}{(D + j_{sa} - j^{sa} - \boldsymbol{l} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})} \right.$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\boldsymbol{l}+1)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-1)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j_{sa}-j_s)!}+$$

$$\sum_{\mathbb{k}=1}^{\boldsymbol{l}}\sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_{sa}-j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

GÜLDÜNYA

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(\boldsymbol{l_s} + j_{sa}} \sum_{= j_{sa} + 1)}$$

$$\sum_{\boldsymbol{n} + \mathbb{k}}^{(n_i} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k}}$$

$$\sum_{= n_{is} + j_s}^{(\ )} \sum_{- \mathbb{k}_1 (n_{sa}}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - s - \right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$1 \wedge j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j \leq \boldsymbol{n} + j_{sa} - \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} - 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} - j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge \mathbb{k} > \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}\right.$$

GULDUNYA

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - \quad - 1)}{(j_s - 2)\,(n_i - n_{is} \quad + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{ik} - \mathbb{k}_1 \quad 1)!}{(j_{ik} - j_s - 1) \quad i - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} - j_{ik} \quad 1)! \cdot (n \quad + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} \quad 1)!}{(n_{sa} + j \quad - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + \quad - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)} \right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \boldsymbol{l} + 1)! \cdot (\boldsymbol{l} - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa} + 1)!}{(j_s + \boldsymbol{l_{ik}} - \boldsymbol{l} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{l} - \boldsymbol{l_{sa}})! \cdot (D + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l} + 1}^{\boldsymbol{l_{sa}} - j_{sa} - \boldsymbol{l} - j_{sa} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)$$

$$\sum_{\boldsymbol{l_s}=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_s=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{(j_{ik}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ )}$$

$$\sum_{n_{ik}=n_{sa}+j_s-j_{sa}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i+\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq{}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$1\leq j_{sa}\leq j_{ik}-j_{sa}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$j_{sa}^{ik}-1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}
$$

$$
\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-\boldsymbol{n}+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{sa}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-n_{is}-j_s+1)!} \cdot
$$

$$
\frac{(n_{is}-n_{is}-\mathbb{k}_1-1)!}{(j_s-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)! \cdot (j_s-2)!} \cdot
$$

$$
\left. \frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})! \cdot (\boldsymbol{n}+j_{sa}-j^{sa}-s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}
$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-\quad-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\quad-n_{sa}-j^{sa})!}\cdot$$

$$\frac{-1)!}{(n_{sa}+\quad-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{(\quad-j_s-\quad+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\quad-j_{sa}^{ik}+1)!}{(\quad+\boldsymbol{l_{ik}}-\quad)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{s}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{k} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )} \right.$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{}-s)!}\Bigg)$$

$$\left(\sum_{k=\boldsymbol{l}}^{(}\sum_{(j_s=2}^{(j_{sa}^{ik})}\right.$$

$$\sum_{j_{ik}=j^{s}}^{(+j_{sa}-\boldsymbol{l})}\sum_{-j_{sa}\ (j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}-j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+1)}^{(n_{is}+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(j_{sa}=j_{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1)}$$

$$\frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (j_s - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{is} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\left.\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\right) -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq \ldots \leq j^{sa}+j_{sa}^{ik}\ldots \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}\ldots \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+\ldots-j_{sa}=\boldsymbol{l_{ik}}\ldots$

$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l_s}+\ldots-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \ldots > 0 \wedge$

$j_s \leq j_{sa}^{i}-1 \ldots {}_{sa}^{ik}=j_{sa}\ldots 1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{\ldots, \mathbb{k}_1, j_{sa}^{ik}, \ldots j_{sa}, \cdots, j_s\}$

$\ldots > 4 \wedge \ldots = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}\ldots \mathbb{k}\ldots+\ldots_2 \Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa})!} \cdot$$

$$\frac{(j_{ik} - \boldsymbol{l} - 1)!}{(j_{ik} - j_s - \boldsymbol{l}_s + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(\boldsymbol{l_{ik}} + \boldsymbol{l_{ik}} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{k}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2$

$$_{fz}S_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{(\ )}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\left.\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot\right)$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j$$

$$\left(\sum_{k=\boldsymbol{l}}^{(}\ \sum_{(j_s=$$

$$\sum_{j_{ik}=}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i\ +1)}$$

$$\sum_{n_{ik}=}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(j^{sa}=}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_{is}-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{is}-\mathbb{k}_1-1)!}{(j_{ik}-j_{ik}-1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} + 1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j^{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = 1 > 0 \wedge$

$j_s \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{s, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_s\}$

$z > 4 \wedge \quad = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-\ \ -1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\ \ -n_{sa}-j^{sa})!}\cdot$$

$$\frac{-1)!}{(n_{sa}+\ \ -\boldsymbol{n}-1)!\cdot(\ \ -j^{sa})!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{(\ \ -j_s-\ \ +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\ \ -j_{sa}^{ik}+1)!}{(\ \ +\boldsymbol{l_{ik}}-\ \ \boldsymbol{s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+\ \ -\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{k} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = \boldsymbol{l_{sa}} + \boldsymbol{n} - D - j_{sa} + 1)} \right.$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(\ )} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\left. \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \right)$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)$$

$$\left(\sum_{k=}^{(\boldsymbol{l_s}-\boldsymbol{l}+}\ \sum_{=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}}\right.$$

$$\sum_{j_{ik}=j_s}^{j_{sa}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{i\mathbb{k}} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot$$

$$\frac{n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-1)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j^{sa} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l} \wedge$

$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{is} < j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = \mathbb{k}_1+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}\right.$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - 1)! \cdot (\boldsymbol{n} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 1)!}{(j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - s)!}{(D + j^{sa} - \boldsymbol{n} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\right.$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_s=$$

$$(\boldsymbol{l_{ik}}-j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}}^{}\sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=}^{(n_i-j_s+1)} {}_{\mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(\ =n_{ik}+j_{ik}-j^{sa}-}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-\ -j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+\ ^{sa}+j_{sa}-\ -j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\ -j_s-\ +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\ )!}{(D+\ ^{sa}+s-\ -\boldsymbol{l_i}-\ )!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq\ -\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}+1 \leq \boldsymbol{l} \leq\ \boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+\ \wedge j_s+j_{sa}^{ik}-1 \leq\ \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\ \leq \boldsymbol{n}\ -s$

$\boldsymbol{l_{ik}}\ +1 > \boldsymbol{l_s} \wedge \boldsymbol{l}\ +j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge$

$D+j_{sa}^{ik}\ \leq \boldsymbol{l_{ik}} \leq D\ \boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1 \wedge$

$D \geq\ < n \wedge l\ \ 0 \wedge$

$j_{sa} \leq j_{sa}^{i}\ \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

$\{;s\ \ \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{n_{is} + j_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} + n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum^{(\ )}_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-1)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j^{sa} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l} \wedge$

$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{is} < j_{sa}^{ik}-1$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = \cdots + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}\right.$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum^{(\ )}_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum^{(n_i-j_s+1)}_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

GULDUNYA

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(+j_{sa}-s)!}{(+j^{sa}-\boldsymbol{n}-)!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik})}\ \sum_{(j_s=2)}\right.$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\quad-\boldsymbol{l}+1)}\sum_{(j_s=}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+}^{\boldsymbol{l}+1}\sum^{(\quad)}_{(j^{sa}=j_{ik}-j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg) -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{ik}+j_{ik}-j^{sa}-1}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j\right.\ -\mathbb{k}\ -\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}\right.\ -j_{sa})!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{-j_s-\ 1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\ )!}{(D+\ +s-\ -\boldsymbol{l_i}-\ )!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq\ -\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}+1 \leq \boldsymbol{l} \leq\ \boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{i}-j_{sa}^{ik}+\ \ j_s+j_{sa}^{ik}-1 \leq\ \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq\ ^{sa} \leq \boldsymbol{n}+\ -$

$\boldsymbol{l_{ik}}-\ ^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_s}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge$

$D+j_{sa}^{ik}-\ < \boldsymbol{l_{ik}} \leq D\ \boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1 \wedge$

$D \geq\ < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-\ \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

$\{s\ \ \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{ik}_{sa})}^{(\ )}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+j_{ik}-\mathbb{k}_2)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} + n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j^{ik}_{sa} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j^{ik}_{sa} + 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j^{ik}_{sa}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j^{ik}_{sa}-D-s}^{\boldsymbol{l_s}+j^{ik}_{sa}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{ik}_{sa})}^{(\ )}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-1)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j^{sa} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l} \wedge$

$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=\mathbb{k}_1+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}\right.$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-s)!}{(D+j^{sa}-\boldsymbol{n}-s)!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{\boldsymbol{l}}^{(l_{ik}+\boldsymbol{n}-j_{sa}^{ik})}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l}+1}^{\boldsymbol{n}-D\ (j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_i-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{sa}-j_{sa}^{ik})}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}^{n} \sum^{(n_i+1)} (n_{is}=\boldsymbol{n}+\mathbb{k}$$

$$\sum_{n_i=n_{is}+j_s-\mathbb{k}_1}^{(\ )} \sum (n_{sa}=j^{sa}-\mathbb{k}_2)$$

$$\frac{(n_i + j^{sa} + j_{sa}^{ik} - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + j_{sa}^{ik} - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D > \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} - j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n}\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{l=1}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{j_{ik}=j_s+j_{s}-1}^{(\boldsymbol{l_{sa}}-1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-\mathbb{k})}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=j_s+j_s-j_{ik}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{ik}=\boldsymbol{n}-j_{ik}+1}^{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum^{(\ )}_{(j^{sa}=j_{ik}+j_{sa}-j^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum^{(n_i-j_s+1)}_{(n_{is}=\ \mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum^{(\ )}_{(\ =n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - \quad - j_{sa} - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} - j^{sa} + j_{sa} \quad - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \ )!}{(\ ^{sa} + s - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \ D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq \ ^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \ ^{ik} \leq j^{sa} \ \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \ \wedge \boldsymbol{l_{sa}} + \ - j_s \ \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_i} \leq \ + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < \ \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \ \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq \ j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \ \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\ + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

GULDUNYA

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l})}^{(n_{sa}+j_{sa}-\boldsymbol{l})}
$$

$$
\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{ik}+j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{ik}+\mathbb{k}_2-j_{ik}}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

GÜLDÜMYA

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=j_{sa}+1)}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}$$

$$\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}$$

$$\boldsymbol{l_{sa}}$$

$$\boldsymbol{l_{sa}}\leq D$$

$$D\geq$$

$$j_{sa}\leq j_{sa}^{i}$$

$$\{j_{sa}^{s},\cdots,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$$

$$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$$

$$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$$

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$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-\quad-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\quad-n_{sa}-j^{sa})!}\cdot$$

$$\frac{-1)!}{(n_{sa}+\quad-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{(\quad-j_s-\quad+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\quad-j_{sa}^{ik}+1)!}{(\quad+\boldsymbol{l_{ik}}-\quad)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

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$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\big) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - \ \wedge j_{sa}^{s} < j_{sa}^{ik} - \ \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right)$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_2 \cdot z = 2 \wedge \mathbb{k} - \mathbb{k}_1 + \mathbb{k}_2$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}\right.$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - 1)!}{(D + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}^{ik}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_s}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j_{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}-j_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

GÜLDÜNYA

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik})}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}}\sum_{=j_{sa}+2)}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i}\ +1)$$

$$\sum_{n_{ik}=}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{=}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\sum_{n_{ik}=}^{\mathbb{k}_2-j_{ik}+}\ \sum_{=}^{j^{sa}+1)}$$

$$\frac{(-n_{is}-1)!}{(-2)!\cdot(-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(n+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{(j^{sa}=j_{sa}+1)}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} -$ $\wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} +$ $- j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik}$ $\boldsymbol{l_{ik}}\big) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}}$ $D + j_{sa} - \boldsymbol{n}$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik}$ $1 \leq j_{ik} \leq$ $a} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} +$ $- j_{sa}^{ik} \leq j^{sa}$ $\boldsymbol{n} + j_{sa} - s\big)\Big)$

$D \geq \boldsymbol{n} < n \wedge l$ $> 0 \wedge$

$j_{sa} \leq$ $- 1 \wedge j_{sa}^{ik} =$ $- 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}$: $\left\{j_{sa}^{s}, \cdots,\right.$ $j_{sa}^{ik}, \mathbb{k}_2, j_s$ $\cdots, j_{sa}^{i}\big\} \wedge$

$s >$ $= s + \mathbb{k} \wedge$

$\mathbb{k}_z$: $z = 2 \wedge$ $= \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}\right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-\quad-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\quad-n_{sa}-j^{sa})!}\cdot$$

$$\frac{-1)!}{(n_{sa}+\quad-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{-j_s-\quad+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(\quad+j^{sa}-\boldsymbol{l}-\quad)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{}\ \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}\right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-$$

$$\frac{(D+j^{sa}-\boldsymbol{n}-$$

$$+\sum_{k=\boldsymbol{l}}^{}\sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}$$

$$\sum_{}^{\boldsymbol{l_{ik}}-}\sum_{}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{+j_{sa}^{ik}-\boldsymbol{l}+1}^{}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{(j_{ik}=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ +1)}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{ik}+j_{ik}-j^{sa}-1}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j \quad - \mathbb{k} - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} \quad - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l} - \boldsymbol{l} - 1)!}{(j_s - \quad + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \quad)!}{(D + \quad + s - \quad - \boldsymbol{l_i} - \quad)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \quad D + j_{sa} - \boldsymbol{n}$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \quad \leq j_{ik} \leq \quad ^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j \quad \leq j^{sa} \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l} \quad \boldsymbol{l_{sa}} + j_{sa} \quad - j \quad \boldsymbol{l_{ik}}\big) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s\big)\big) \wedge$

$D \geq \boldsymbol{n} < \quad \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{ik})}^{(\ )}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+\mathbb{k}_2)}^{(n_{is}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\left. \frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - 1)! \cdot (\boldsymbol{n} - n_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 1)!}{(j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (\quad - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\quad + \boldsymbol{l_{sa}} - \quad - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + \quad - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}+j_{sa}-j^{sa}-s)!}\Bigg)$$

$$\sum_{k=\boldsymbol{l}}^{(n_i-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_s+j_{sa}^{ik}-1}^{(\ )}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - \ \wedge j_{sa}^{s} < j_{sa}^{i} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s +$

$\mathbb{k}: z = 2 \wedge \ = \mathbb{k}_1 + \ \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=2)}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)} $$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \boldsymbol{l} + 1)! \cdot (\boldsymbol{l} - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{sa} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(j_s + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j_s + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = \boldsymbol{l_{sa}} + \boldsymbol{n} - D - j_{sa} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right.}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\ -j_{sa}\right)!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\ +j_{sa}-j^{\ }\ )!}-$$

$$\sum_{k=\boldsymbol{l}\ }\sum_{\ (D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\ -j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\ _i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(\ -\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$(\ \ < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )} \right.
$$

$$
\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}
$$

$$
\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(l_k-j_{sa}^{ik}+1)}\sum_{(\quad=2)}\right.$$

$$\sum_{(l_{ik}+\boldsymbol{n}-D}^{j^{sa}+j_{s}-j_{sa}-1}\sum_{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(l_s+j_{sa}}$$

$$\sum_{n_i}^{n}\sum_{\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\quad+1)}$$

$$\sum_{n_{is}+j_{ik}-\mathbb{k}_1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}$$

$$\sum_{n_{ik}=n_{sa}+j_{ik}-j_{ik}+1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(n_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}-}^{(n_{}}$$

$$\sum_{n_{is}+j_s-j_{ik}-\mathbb{k}}^{}\ \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

$$\sum_{n_{ik}}^{}\ \sum_{\mathbb{k}_2-j_{ik}}^{}\ \sum_{(n_{sa}}^{}\ \sum_{j^{sa}+1)}$$

$$\frac{(n_{is}-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik})}\sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{j^{sa}+1)}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}-n_{sa}-1)}{(j^{sa}-j_{ik}-1)!\cdot(}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_{}-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

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$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} + 1 \leq \boldsymbol{l} \leq \ _{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} + 1 \leq \boldsymbol{l}$ $\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j$ $j_{sa}^{ik} - 1 \leq j_{ik}$ $j^{sa} + j_{sa}$ $j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa}$ $s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s}$

D $j_{sa} - \boldsymbol{n}$ $_{sa} \leq D$ $\boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k}$ $0 \wedge$

j_{sa} $\leq j_{sa}^{s}$ $1 \wedge j_{sa}^{ik} = j_s$ $- 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}$: $\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j$ $\mathbb{k}$ $, \cdots, j_{sa}^{i}\} \wedge$

s $4 \wedge s$ $s + \mathbb{k} \wedge$

$\mathbb{k}_z$: $z = 2$ $\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\boldsymbol{l} - \boldsymbol{l} - 1)!}{(j_s - j_s - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(\boldsymbol{l_{ik}} + \boldsymbol{l_{ik}} - j_{sa}^{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

GÜLDÜNYA

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j$ $j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} +$ $j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s}$

$D + j_{sa} - \boldsymbol{n}$ $\boldsymbol{l_{sa}} \leq D$ $\boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I =$ $> 0 \wedge$

$j_{sa} \leq j_{sa}$ $- 1 \wedge j_{sa}^{ik} = j_s$ $- 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, \ ^{ik} \ \mathbb{k}_2, \ \cdots, j_{sa}^{i}\right\} \wedge$

s $4 \wedge$ $s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2$ $= \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}\right.$$

GÜLDÜNYA

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - 1)}{(j_s - 2)!\,(n_i - n_{is}}$$

$$\frac{(n_{} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)!\,(n_i - n_{is} - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!}$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + \quad - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}\right.$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!}$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \boldsymbol{l} + 1)! \cdot (\boldsymbol{l} - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa} + 1)!}{(j_s + \boldsymbol{l_{ik}} - \boldsymbol{l} - 1)! \cdot (j_{ik} - j_{sa}^{ik} + 1)!}$$

$$\frac{(j_{sa}^{ik} + \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa} - 1} \quad \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \quad \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{sa}}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-1)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{l_{sa}}+j_{sa}-j^{sa}-\boldsymbol{l})!}+$$

$$\sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}-j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik})}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}$$

$$\sum_{\mathbb{k}}^{(n_i-j_s+1)}\sum_{(n_{i\cdot}+\mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}+\mathbb{k}_2-j_{ik}+1\leq n_{sa}\leq\boldsymbol{n}-j^{sa}+1)}^{n_{is}+j_s-\mathbb{k}_1}\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-1)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

GÜLDÜMYA

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} \quad - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} \quad {}_{sa}^{ik} - j_{ik} - s \quad {}_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} \quad \boldsymbol{l} - 1)!}{\quad \boldsymbol{l} + \quad)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \quad)!}{(D + j^{sa} + s - \boldsymbol{n} - \quad - j_{sa})! \quad \boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \quad \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s \quad {}_{sa}^{ik} - 1 \leq j_{ik} \quad {}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq \quad {}^{sa} \leq \boldsymbol{n} + j_{sa} - \quad \wedge$

$\boldsymbol{l_{ik}} - j_{sa} + \quad > \boldsymbol{l_s} \wedge \quad + j_{sa}^{ik} - j_{sa} >$

$D + j_{sa} - \boldsymbol{n} < \quad \leq D + \quad + j_{sa} \quad - 1) \vee$

$(D \geq \quad < n \wedge \boldsymbol{l} \neq \ {}_{\boldsymbol{i}}\boldsymbol{l} \quad \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D \quad \boldsymbol{l_s} + j_{sa} - \quad - \boldsymbol{l_{sa}} \wedge$

$1 \leq \quad \wedge j_{ik} - j_{sa} \quad + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\quad \quad - 1 > \boldsymbol{l_s} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

GULDUNYA

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}
$$

$$
\sum_{(n_i=j_s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}
$$

$$
n_{is}+ j_{ik}-\mathbb{k}_1 \quad (\quad sa}-\mathbb{k}_2)
$$

$$
\sum_{\boldsymbol{n}+\mathbb{k}_2-j_{ik}} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \quad)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(\quad n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \quad j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)} \right.
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

GÜLDÜMYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-\boldsymbol{n}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(j^{sa}-1)!}\cdot$$

$$\frac{(\boldsymbol{n}-\boldsymbol{l}-1)!}{(\boldsymbol{n}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+1)!}{(\boldsymbol{l_{ik}}+\boldsymbol{l_{ik}}-\boldsymbol{l}-\boldsymbol{l})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}\ \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \boldsymbol{l} + 1)! \cdot (\boldsymbol{l} - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa} + 1)!}{(j_s + \boldsymbol{l_{ik}} - \boldsymbol{l} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(j_s + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j_s + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = \boldsymbol{l_{sa}} + \boldsymbol{n} - D - j_{sa} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)$$

$$\sum_{\boldsymbol{l_i}=1}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s)}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}$$

$$\sum_{j_{ik}=j_s-\boldsymbol{l_{ik}}-1}^{(\boldsymbol{l_{ik}}-1)}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\boldsymbol{n}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

GÜLDÜNYA

$$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \le D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$$

$$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s, j_{ik}, \ldots, a} = \sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$j_{\ldots} \sum_{j_{\ldots}}^{j_{sa}^{ik} - j_{sa}} \sum_{(\ldots + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1)}$$

$$j_{\ldots} \sum_{j_{sa}^{ik}+1} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

GÜLDÜNYA

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = \boldsymbol{l_{ik}} + \ldots + 2)}^{(\boldsymbol{l_{sa}} - \ldots)}$$

$$\sum_{\ldots + \mathbb{k}} \sum_{(n_{i\ldots} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} \ldots \mathbb{k}_2 - j_{ik} + \ldots}^{n_{is} + j_s \ldots - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} \ldots - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - \ldots)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - \ldots - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(\ldots j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

GÜLDÜNYA

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right.\qquad-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}\right.\qquad_{sa}^{ik}-j_{ik}-s\qquad_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}\qquad\boldsymbol{l}-1)!}{\boldsymbol{l_s}\qquad\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\qquad)!}{(D+j^{sa}+s-\boldsymbol{n}-\qquad-j_{sa})!\left(\boldsymbol{n}+j_{sa}-j^{sa}-s\right)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+\qquad_{sa}-1\qquad\leq j^{\qquad}\qquad_{sa}^{ik}-\qquad\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+\qquad-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l}\qquad\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{\qquad}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l}\qquad+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+s\qquad\boldsymbol{n}\qquad\boldsymbol{l_i}\leq D\qquad\boldsymbol{l_s}+s-\boldsymbol{n}-1$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\qquad_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\qquad D-\boldsymbol{n}\qquad1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+\qquad j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-\qquad^{ik}\leq j^{sa}\leq\qquad+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}\qquad+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+j_{sa}-\qquad\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\Big)\wedge$$

$$\qquad\wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$$

$$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$$

$$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$$

GÜLDÜNYA

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}
$$

$$
\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa} - 1} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}_1}^{n} \sum_{(\boldsymbol{n} + \mathbb{k}_1 - j_s + 1)}^{(n_i - j_s + 1)}
$$

$$
\sum_{n_{is} = \boldsymbol{n} + \mathbb{k}_1 - j_s + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{is} + \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_1)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}
$$

$$
\sum_{j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)}
$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-\quad-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\quad-n_{sa}-j^{sa})!}\cdot$$

$$\frac{-1)!}{(n_{sa}+\quad-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{-j_s-\quad+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}\quad\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}\quad\boldsymbol{l_{sa}}-j\quad\boldsymbol{l}\quad(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j\quad-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + \quad - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j \quad < j_{sa}^{ik} - 1$

$\boldsymbol{s}: \left\{ j_{sa}^{S} \cdots, \mathbb{k}_{\_}, j_{sa}^{ik}, \mathbb{k}_{2} \quad _{a}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \quad 4 \wedge \boldsymbol{s} = s \quad \wedge$

$\mathbb{k}_z: \quad = 2 \wedge \mathbb{k} = \mathbb{k}_1 \quad \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} + \boldsymbol{n} - D - j_{sa})} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

GULDUNYA

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-1)!\cdot(j^{sa}-j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}\ \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - \quad)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - \quad - j_{sa}\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} \quad)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \quad (\boldsymbol{n} + j_{sa} - j \quad s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 2)} \sum_{(j_s \quad j_{sa}+1)}$$

$$\sum_{j_{ik} = \quad + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\quad)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(+ j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(- \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\boldsymbol{\quad l} \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}} \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

GÜLDÜNYA

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{sa}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{sa}+j_{sa}^{ik}+1)} \sum_{(j_s \ldots}$$

$$\sum_{\ldots=j^{sa}+j_{sa}^{i}\ldots} \sum_{(j^{sa}=\boldsymbol{l_{ik}}\ldots)}^{(\ldots+j_{sa}-\boldsymbol{l})} \sum_{\ldots(D-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_{sa}-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{i\mathbb{k}} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot$$

$$\frac{- n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜNYA

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-{}^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{s}-s=\boldsymbol{l_{sa}}$

$D+j_{sa}^{ik}-\boldsymbol{n}<\boldsymbol{l_{ik}}\leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-\wedge j_{sa}^{s}<j_{sa}^{i}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{s}\right)\wedge$

$s>4\wedge\boldsymbol{s}=s+$

$\mathbb{k}_{}z=2\wedge=\mathbb{k}_1+\Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

GÜLDÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \boldsymbol{l} + 1)! \cdot (\boldsymbol{l} - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - \boldsymbol{l} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - j_{sa} - \boldsymbol{l_{sa}})! \cdot (j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l} + 1}^{j_{ik} - \boldsymbol{l} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{\boldsymbol{l_{ik}}=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{\boldsymbol{l_{ik}}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{(j_s=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ )}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{sa}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq{}_{\boldsymbol{i}}\boldsymbol{l}\wedge j_{sa}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_{sa}\leq j_{ik}-j_{sa}-1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$j_{sa}+j_{sa}^{ik}-1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}^{ik}-\boldsymbol{n}<\boldsymbol{l_{ik}}\leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik})} \sum_{(j_s=2)}^{}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{}^{(j_{ik}+j_{sa}^{ik})}
$$

$$
\sum_{(n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{}
$$

$$
\sum_{n_{is}+}^{j_{ik}-\mathbb{k}_1} \sum_{}^{sa}-\mathbb{k}_2)
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s -)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(- n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(- j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}-l+1}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j^{sa}+1)}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_{ik}-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}-l+1}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

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$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{i} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\,(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\,(j_{ik}-j_s-\boldsymbol{l}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-1)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-j_{sa}^{ik})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}^{ik}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{l_{sa}})!\cdot(j_{sa}^{ik}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} +}$$

$$\sum_{j_{ik} = j^{sa} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{ik = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_i=j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{i}}{(j_s - 2)! \cdot (}$$

$$\frac{- n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!}$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\boldsymbol{n}-\mathbb{k}_1\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-1)!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j_{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge D \leq \mathbb{k} > 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{i} < j_{sa}^{ik}-1 \wedge$

$\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa}^{s},\cdots,j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}=s$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{sa}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon \left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z\colon z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s,j_i\ldots a}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{(j^{sa}=j_{sa}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j}$$

$$\sum_{j_{ik}=}\sum_{}$$

$$\sum_{}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{=n_{is}+j_s-j}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(-\boldsymbol{n}-\mathbb{k}_1-)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\geq \boldsymbol{n} < \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik} - \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}
$$

$$
\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1)}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n_i} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}
$$

$$
\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k} - j_{ik} + 1}^{j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = j_{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}
$$

$$
\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1)}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-j}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}-j_{sa}-s>0 \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{s}-j_{sa}-1 \wedge j_{sa}^{s}-j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s} \leq \{j_{sa}^{s},\cdots,\mathbb{k}_1-j_{sa}^{ik},\mathbb{k}_2,j_{sa}-1,\cdots,j_{sa}^{i}\} \wedge$

$s>0 \wedge \boldsymbol{s}=s+\mathbb{k}$

$\mathbb{k}_z: z=\ \wedge \mathbb{k}=\mathbb{k}_1+\ \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}\ \sum_{(j^{sa}=j_{sa}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

GULDUNYA

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

GÜLDÜNYA

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j_{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )} $$

$$ \sum_{j_{ik} = j_{sa} + 1}^{\boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{l} - j_{sa} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} $$

$$ \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} $$

$$ \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot $$

$$ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot $$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1}\quad\sum_{(j^{sa}=j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}\ (n_{is}=\boldsymbol{n}+\mathbb{k}}^{n\ (n_i+1)}$$

$$\sum_{(n_{is}=n_{is}+j_s-\mathbb{k}_1\ (n_{sa}}^{(\ )}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-\quad-s-\quad-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\quad-\mathbb{k}_2)!\cdot(\boldsymbol{n}\quad+j_{sa}^{ik}-j_{ik}-s-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}\quad j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+\quad\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\quad<n\wedge\boldsymbol{l}\neq\quad\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+\quad\wedge$

$1\quad j_s\leq j_{ik}-\quad+1\wedge\quad+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}\quad j_{sa}-j_{sa}^{ik}\leq j^{\quad}<\boldsymbol{n}+j_{sa}\quad\wedge$

$\boldsymbol{l}_{\boldsymbol{k}}-j_{sa}^{ik}\quad1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}\quad j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D+s-\boldsymbol{n}<\quad<D\quad_{\boldsymbol{s}}+s-\boldsymbol{n}-1\wedge$

$D\quad\boldsymbol{n}<\quad\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}\quad\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} \quad 1)!}{(j_s \quad 2)! \cdot (n_i \quad j_s + 1)!} \cdot
$$

$$
\frac{n_{ik} \quad \mathbb{k}_1 - 1)!}{j_{ik} - j_s - 1)! \quad n_{is} + j_s \quad n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} \quad j_{ik} - 1)! \quad n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-{}^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{s}-s>\boldsymbol{l_{s}}$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-\ \wedge j_{sa}^{s}<j_{sa}^{i}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{s}\right)\wedge$

$s>4\wedge\boldsymbol{s}=s+$

$\mathbb{k}\colon z=2\wedge\ =\mathbb{k}_1+\ \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \quad (\boldsymbol{n} - j^{sa})!}$$

$$\frac{(\quad \boldsymbol{l} - 1)}{(\boldsymbol{l_s} \quad - \boldsymbol{l} + 1) \quad - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} \quad s)!}{(D + j^{sa} - \boldsymbol{n} \quad)! \cdot (\boldsymbol{n} + j_s \quad - j^{sa} - s)!}$$

$$\sum_{\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{\quad = j_{sa}^{ik} + 1}^{\quad - \boldsymbol{l} + 1} \quad \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\quad)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \quad \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \quad \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} \sum \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_s - 1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{ik}}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{is}=n_{ik}+j_{ik}-j^{sa}-}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}-j^{sa}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l})!}{(D+j^{sa}+s-\boldsymbol{l_s}-\boldsymbol{l_i}-j^{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq \boldsymbol{n}-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa}+\boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_i} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq \boldsymbol{l_i}+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{s}=j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s},\cdots,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\} \wedge$

$z=4 \wedge z=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{j^{sa}+1)}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} - j_{sa} + 2)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1} \sum^{(\ )}_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum^{(n_i - j_s + 1)}_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-[illegible]}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-[illegible]^{a}-s)!}$$

$$\sum_{[illegible]\boldsymbol{l}}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-[illegible])}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-[illegible]+2)}$$

$$\sum_{j_{ik}=[illegible]j_{sa}^{ik}-1}\sum_{(j^{sa}=[illegible]-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{[illegible]n_i=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{[illegible]_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{[illegible]+j^{sa}[illegible]j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}[illegible]-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq[illegible]n\wedge\boldsymbol{l}\neq[illegible]_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{i[illegible]}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}[illegible]-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} $$

$$ \sum_{j_{ik}=j_s+j_{sa}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{ik})}^{(} $$

$$ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=n_{is}-j_s+1)}^{(n_i-j_s+1)} $$

$$ \sum_{n_{ik}=\boldsymbol{n}+j_{ik}-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot $$

$$ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} - $$

$$ \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} $$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\boldsymbol{l}+\ )!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\ )!}{(D+j^{sa}+s-\boldsymbol{n}-\ -j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+\ \leq j_{ik} \leq j\ +j_{sa}^{ik}-j\ \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}\ _{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-\ =\boldsymbol{l_{ik}} \wedge \boldsymbol{l}\ j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+\ \boldsymbol{n} \leq \boldsymbol{l_i} \leq \ \boldsymbol{l_s}+s-\boldsymbol{n}-\ \wedge$

$D\ \boldsymbol{n}<n \wedge\ \mathbb{k}>0$

$j_{sa}\ j_{sa}^{i}-1 \wedge j_{sa}^{ik}\ _{sa}-1 \wedge\ <j_{sa}^{ik}-1 \wedge$

$\ \{j_{sa}^{s},\cdots\ ,j_{sa}^{ik},\mathbb{k}_2,j_{sa}\cdots,j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}=s$

$\mathbb{k}_z.z=2\ \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{l_{sa}} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ [illegible] $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+$ [illegible] $-s >$ [illegible] $\wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-$ [illegible] $\wedge j_{sa}^{s} < j_{sa}$ [illegible] $1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots,$ [illegible] $\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+$ [illegible] $\wedge$

$\mathbb{k}_{-}: z=2 \wedge$ [illegible] $=\mathbb{k}_1+$ [illegible] $\Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{j_{ik}=j_{sa}^{ik}+1}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}\sum_{(j^{sa}=j_{sa}+1)}^{n}\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \boldsymbol{l} + 1)! \cdot (\boldsymbol{l} - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - j_{sa}^{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa}^{ik} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - j_{sa}^{ik} - \boldsymbol{l_{sa}})! \cdot (D + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 2)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{\boldsymbol{k}=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}+j_{sa}^{ik}-j_{sa}}\sum_{(j_{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{sa}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq{}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}+j_{sa}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq{}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{z=2,\ldots,j_{ik}=j_{sa}} = \sum_{\ldots} \sum_{(j_{sa}=j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{sa}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}\ (n_{is}=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum^{(n_i+1)}$$

$$\sum^{(\ )}$$

$$=n_{is}+j_s-\mathbb{k}_1\ (n_{sa}\ \ j^{sa}-\mathbb{k}_2)$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}\ \ j_{ik}-s-\ \ -\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}\ \ \mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}\ \ j^{sa}+j_{sa}\ \ j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}\ \ j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+\ \ -\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ \boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}\ \ 1\wedge$

$1\geq j_s\leq j_{ik}-\ \ ^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}\ \ _{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}\ \ 1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\Big)\wedge$

$(D\geq\boldsymbol{n}<\ \ \wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$\ \ \leq j_s\leq\ \ -j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}}^{(\boldsymbol{l_{sa}}-1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+j_s-j_{ik}}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 2)} \sum_{(j_s=2)}
$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right.\qquad-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-\qquad-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}\qquad\boldsymbol{l}-1)!}{\qquad\boldsymbol{l_s}-\boldsymbol{l}+\qquad!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\qquad)!}{(D+j^{sa}+s-\boldsymbol{n}-\qquad-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$$

$$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}\wedge$$

$$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa})\vee$$

$$(D\geq\qquad<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$\qquad\boldsymbol{l}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}} \sum_{\boldsymbol{k}=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j_{sa}+1}^{j^{sa}+j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\sum_{(j^{sa}=\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}^{\boldsymbol{n}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+1)}^{(n_{i}+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(j^{sa}=\boldsymbol{n}+j_{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(\boldsymbol{n}-n_{is}-1)!}{(j_s-2)!\cdot(\boldsymbol{n}-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} - 1)! \cdot (\boldsymbol{l_s} - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - j_{sa} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - (\boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}+1} \quad \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}+1)}^{(\boldsymbol{l_{sa}}+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_i=\boldsymbol{n}+\mathbb{k}\ (n_{is}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+j_s-j_{ik}}^{n_{is}+j_s-j_{ik}} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{}-n_{ik}-\mathbb{k}_1}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}}{(j^{sa}-j_{ik}}$$

$$\frac{(n_{sa}}{(n_{sa}+j_{}}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{+\boldsymbol{l}}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-1)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa}\big)\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

$$
\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=j_{ik}+j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-n_{is}-j_s+1)!} \cdot
$$

$$
\frac{(n_{is}-n_{is}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)! \cdot (j_s-2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})! \cdot \left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!} \cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})! \cdot (\boldsymbol{n}+j_{sa}-j^{sa}-s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{-\boldsymbol{l}-1)!}{-j_s-1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}-\boldsymbol{l_{sa}}-j_{sa})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

GÜLDÜNYA

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} - j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{i} \leq \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 0 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\exists_z : z = z + \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

GULDUNYA

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-1)!\cdot(\boldsymbol{n}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{sa}^{ik}-\boldsymbol{l_s})!\cdot(\boldsymbol{l_{ik}}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - \quad)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} \quad)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j \quad s)!} -$$

$$\sum_{\quad} \sum_{j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j^{sa}+j \quad -j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(\quad + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(\quad - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$(\quad < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$$

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$$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \le D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$$

$$D + s - \boldsymbol{n} < \boldsymbol{l_i} \le D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$$

$$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l} \ne \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \le D - \boldsymbol{n} + 1 \wedge$$

$$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \le D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$$

$$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\quad-\boldsymbol{l}+1)}\ \sum_{(j_s=}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_s-\boldsymbol{l}+1}^{j_{sa}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{ik}}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=n_{ik}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{is}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1)}^{(\ )}$$

$$\frac{(n_i+j_{sa}^{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{sa}+j_{sa}^{ik}-j_{sa}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}-\boldsymbol{l}-1)!}{(\boldsymbol{l_i}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{n})!}{(D+j_{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-\boldsymbol{l_s})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1 \wedge$

$D+s-\boldsymbol{n}-\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

GÜLDÜNYA

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)} \sum_{(j_s=2)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-k)}^{(\quad)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(\quad-j_s+1)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}+\quad-j_{ik}+1}^{+j_s-j_{ik}} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}
$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_{ik}-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

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$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik})} \sum_{(j_s=2)}
$$

$$
\sum^{j^{sa}+j_{sa}^{ik}} \sum^{(\boldsymbol{l_s}+ -\boldsymbol{l})}
$$

$$
j_{ik}=\boldsymbol{l_{ik}} \; -D \; (j^{sa}=\boldsymbol{l_{sa}}+
$$

$$
\sum^{n} \sum^{(n_i - j_s + 1)}
$$

$$
n_i=\boldsymbol{n}+\mathbb{k} \; (\quad - j_s+1)
$$

$$
+j_s-j_{ik} \quad (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)
$$

$$
\sum \quad \sum
$$

$$
n_{ik}=\boldsymbol{n}+ \quad -j_{ik}+1 \quad (n_{sa}=\boldsymbol{n}-j^{sa}+1)
$$

$$
\frac{(n_i - n_{is} - 1)!}{ - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - 1)!}{(\quad - 2)! \quad - n_{ik} - j_s + 1)!} \cdot$$

$$\frac{n_{is} - n_{ik} \quad \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1) \quad (n_{is} + j_s \quad - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} \quad j_{ik} - 1)! \cdot n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}$$

$$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}$$

$$\boldsymbol{l_{sa}}$$

$$D+j_{sa}$$

$$D+s-\boldsymbol{n}<$$

$$(D\geq\boldsymbol{n}<$$

$$1\leq j_s\leq$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_s, j_{sa}} = \sum_{\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{\boldsymbol{l_s}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}-j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}^{}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\qquad\sum^{(\boldsymbol{l_{sa}}+1)}$$

$$\sum^{(n_i-j_s+1)}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}\sum^{\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum^{n_{is}+j_s-\mathbb{k}_1}\qquad\sum^{a}-\mathbb{k}_2)$$

$$\sum_{n_{ik}}\qquad\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\quad)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-\quad s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(\quad^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{}}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{ik}+j_{ik}-j^{sa}-1}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j^{}-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j^{}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l}-1)!}{(j_s-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\ )!}{(D+\ +s-\boldsymbol{l_i}-\ )!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} = D + j_{sa} - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq {}^{a} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - {}^{ik} \leq j^{sa} + \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \ \wedge \boldsymbol{l_{sa}} + \ - j_s \leq \boldsymbol{l_{ik}} \wedge$

$D \geq \ < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - \ \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{i}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = \ + \mathbb{k} \wedge$

$\ \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa}} = \left(\sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_s=1)} \right.$$

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$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )} \sum_{(j^{sa}=j_{sa})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(\quad-1)!}{(n_{\quad}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l}_{\quad})!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\quad s)!}\Bigg)+$$

$$\left(\sum_{k=\ _i\boldsymbol{l}}^{(\ )} \sum_{(j_s=1)}\right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\left(\boldsymbol{l_{sa}}-\ _i\boldsymbol{l}+1\right)} \sum_{(j^{sa}=j_{sa}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot(j^{sa}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

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$$\sum_{k=\ {}_{i}\boldsymbol{l}} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \boldsymbol{n} - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{n} - \boldsymbol{l_i})!}{(D - \boldsymbol{n} - \boldsymbol{n} - s)! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + \boldsymbol{n} - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \boldsymbol{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{i} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge z = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\ {}_{i}\boldsymbol{l}} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa})}^{\left(\boldsymbol{l_{sa}} - {}_{i}\boldsymbol{l}+1\right)}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}\right.}{(\boldsymbol{l_{ik}}-j_{ik}-\quad+1)!\cdot\left(j_{ik}-\quad\right)!}\cdot$$

$$\frac{(D-\quad\boldsymbol{l_{sa}}-s}{(\quad-j^{sa}-\boldsymbol{n}-\quad)!\cdot(\quad-\quad-j^{sa}-s)!}-$$

$$\sum_{k=\ \boldsymbol{i}\boldsymbol{l}}\ \sum_{(j_s=1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}\ \sum_{(j^{sa}=j_{sa})}^{(\ \ )}$$

$$\sum^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ \ )}\ \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(\quad+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(\quad-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\quad\boldsymbol{n}<\quad\wedge\boldsymbol{l}=\ \ \boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j\quad-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_{ik}}\leq D+j_{sa}^{ik}-\boldsymbol{n}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{\boldsymbol{i^l}}^{(} \sum_{(j_s=1)}^{(}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{i^l}-j_{sa}} \sum_{(j^{sa}=j_{ik}+j_{sa}-}^{(}
$$

$$
\sum_{n_i=}^{n} \sum_{(n_{ik}=\boldsymbol{n}}^{(} \sum_{n_{sa}=}^{j^{sa}+1}
$$

$$
\frac{n_i - n_{ik}}{(j_{ik}-2)!} \cdot \frac{(\mathbb{k}_1 - 1)!}{n_i - n_{ik} \quad j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} - \quad 1)! \quad (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=}^{} \sum_{\boldsymbol{i^l}}^{(} \sum_{(j_s=1)}^{)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{} \sum_{(j^{sa}=j_{sa})}^{()}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

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$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k = {}_{\boldsymbol{i}}\boldsymbol{l}} \sum_{(j_s = 1)}^{(\ )} \right.$$

$$\sum_{j_{ik} = j_{sa}^{ik}} \sum_{(j^{sa} = j_{sa})}^{(\ )}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} \right) +$$

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$$D > \boldsymbol{n} < n$$

$$\left(\sum_{k=\ {}_{i}\boldsymbol{l}}^{(\ )}\sum_{(j_s=1)}^{\left(\boldsymbol{l_{sa}}-\ {}_{i}\boldsymbol{l}+1\right)}\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j^{sa}=j_{sa})}\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}\right.$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1\quad)!}{(j_{ik}-2)!\cdot(n_i\quad-j_{ik}-\mathbb{k}_1\quad)!}\cdot$$

$$\frac{(\quad-n_{sa}\quad)!}{(j^{sa}-j_{ik}\quad)!\cdot(\quad+j_{ik}\quad-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(\quad+j^{sa}\quad-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\quad-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}+1)!\cdot(j_{ik}-j_{sa}^{ik})!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

$$\sum_{k=\ {}_{i}\boldsymbol{l}}^{(\ )}\sum_{(j_s=1)}^{(\ )}\sum_{j_{ik}=j_{sa}^{ik}}^{(j^{sa}=j_{sa})}\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$$

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$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\left(\sum_{\boldsymbol{l}} \sum_{(j_s=1)}^{(\quad)} \right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\quad)}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j \quad \mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} \right) +$$

$$\left(\sum_{k= \quad \boldsymbol{l}} \sum_{(j_s=1)}^{(\quad)} \right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}- \quad \boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}\right.}{(\boldsymbol{l_{ik}}-j_{ik}-\quad+1)!\cdot\left(j_{ik}-\quad\right)!}\cdot$$

$$\frac{(D-\quad\boldsymbol{l_s}-s)!}{(D-j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}\quad\cdot(\boldsymbol{n}+\quad-s)!}\Big)-$$

$$\sum_{k=\ \boldsymbol{i}l}\sum_{(j_s=1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}\sum_{(j^{sa}=j_{sa})}^{(\ \ )}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ \ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(\quad i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(\quad-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\quad\boldsymbol{n}<\quad\wedge\boldsymbol{l}=\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$1\leq j_s\leq j\quad-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\ \boldsymbol{i}\boldsymbol{l}} \sum_{(j_s=} \right.
$$

$$
\sum_{j_{sa}^{ik}} \sum_{(\quad = j_{sa})}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\quad+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1}{(j_{ik} \quad)! \cdot (n_i \quad n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(\quad - n_{sa} \quad 1)!}{(\quad a - j_{ik} - 1)! \quad n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} \right) +
$$

$$
\left(\sum_{k=\ \boldsymbol{i}\boldsymbol{l}} \sum_{(j_s=1)} \right.
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\ \boldsymbol{i}\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Big)$$

$$\sum_{k=1}^{\infty}\sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}\sum_{(j^{sa}=j_{sa})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i+j_{ik}-\mathbb{k}_1+1)}^{(\ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+j_{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i+j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} - j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}} = \sum_{k=\ \ \boldsymbol{i}\boldsymbol{l}}^{(\ \ \ \

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - s - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} -$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\Big) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{is} < j_{sa}^{ik} - 1$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = \cdots + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}} = \left(\sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}}^{} \sum_{(j_s=1)}^{(\ )} \right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

GULDUNYA

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!}\Bigg)+$$

$$\left(\sum_{k=}\sum_{(j_s=1)}^{(\ )}\right.$$

$$\sum_{j_{ik}=}\sum_{(j^{sa}=j_{sa}+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i\ \ n_{ik}-\mathbb{k}_1-1)!}{(\ \ -2)!\cdot(n\ \ -n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(\ \ -n_{sa}-1)!}{(\ \ -j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

$$\sum_{k=\ \ \boldsymbol{l}}\sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}\sum_{(j^{sa}=j_{sa})}^{(\ )}$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\ \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}$ $\wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}$ $1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{i}$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa}}=\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}\ \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}\ \sum_{(j^{sa}=j_{sa})}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

GÜLDÜNYA

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!}\ -$$

$$\sum_{k=\ \ \boldsymbol{l}}^{(\ \ )}\sum_{(j_s=}$$

$$\sum_{j_{ik}}^{(\ \ )}\sum_{ik\ (j\ \ =j_{sa})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}\ (n_{ik}=}^{n}\ \ \sum^{(\ \ )}\ \ \sum_{n_{sa}=}\ \ \sum_{j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i+j^{sa}+j_{s}-j_{ik}-\ \ j_{sa}-\mathbb{k}_1\ \ )!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\ \ +j^{sa}+\ \ -j_{ik}-s-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D\ \ -s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} =\ \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l}_{\boldsymbol{s}} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D+j_{sa}-\boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} =\ \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l}_{\boldsymbol{s}} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} =\ \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

GÜLDÜNYA

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j_{sa}} = \sum_{k=\ {}_{i}\boldsymbol{l}} \sum_{(j_s=1)}^{(\ )} $$

$$ \sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ \ -\ {}_{i}\boldsymbol{l}+1)} $$

$$ \sum_{n_i=\boldsymbol{n}}^{n} \sum_{(n_{ik}=\boldsymbol{n}-\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} $$

$$ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot $$

$$ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot $$

$$ \frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot (j^{sa} - j_{sa})!} \cdot $$

$$ \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} - $$

$$ \sum_{k=\ {}_{i}\boldsymbol{l}} \sum_{(j_s=1)}^{(\ )} $$

$$ \sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} $$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\quad)!}$$

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, 2.3.3.1.1.3.1.1/230-231
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.3.1/187-188
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.4.1.1/3-4
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.4.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.4.2.1/3-4
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.4.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.4.3.1/3-4
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.4.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu

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

GİLDİUMYA

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 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 bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.6.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.6.3.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.6.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.7.1.1/6
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.7.1.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.7.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.7.2.1/6
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.7.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.7.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

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-bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.2.3.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.2.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.4.1.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.4.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.4.2.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.4.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.4.3.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.4.3.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.6.1.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.6.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son

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 bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.7.3.1/11
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.3.1/7-8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.1.1.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.1.1.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.1.1.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.1.2.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.1.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.1.2.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.1.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.1.3.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.1.3.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.2.1.1/7
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.2.1.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.1.1/10-11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.2.2.1/7
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.2.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.2.1/10-11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.2.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.2.3.1/3-4

GÜDÜNYA

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-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.2.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.3.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.2.1/10

GÜDÜNYA

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 ve herhangi iki 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 ve herhangi iki durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık kitabında, 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 ve herhangi iki durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılığın, tanım ve eşitlikleri verilmektedir.

VDOİHİ'nin diğer ciltlerinde olduğu gibi bu ciltte de verilen ana eşitlikler, olasılık tablolarından elde edilen verilerle üretilmiştir. Diğer eşitlikler ise ana eşitliklerden teorik yöntemle üretilmiştir. Eşitlik ve tanımların üretilmesinde dış kaynak kullanılmamıştır.

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