

VDOİHİ

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

Cilt 2.3.2.3.6.1.1.17

İsmail YILMAZ

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VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık Cilt 2.3.2.3.6.1.1.17

İsmail YILMAZ

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1. Bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

Dili: Türkçe + Matematik Mantık



K. Atatürk

Türkiye Cumhuriyeti Devleti
Kuruluşunun
100. Yılı Anısına

DÜZELTME

Bu cilt için

$fz^S_{j_s, j_{ik}, j_i}$

simgesi yerine

$fz^{ISO}_{j_s, j_{ik}, j_i}$

simgesi olmalı.

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 deklaratif bilgi yapılarıyla birlikte matematik mantık yapıları üzerine çalışmalar yapmıştır. Yazarın farklı alanlarda yapmış olduğu çalışmalar arasında ölçme ve değerlendirmeye yönelik çalışmaları da mevcuttur.

VDOİHİ

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- ✓ Teorik kabullerle genetikle ilişkilendirilmiştir.
- ✓ Bilgi merkezli değerlendirme yöntemidir.

Sanırım bilgi ve teknolojideki kaderimiz veriyle ilişkilendirilmiş.

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GÜLDÜNYA

Simge ve Kısaltmalar

n : olay sayısı

n : bağımlı olay sayısı

m : bağımsız olay sayısı

l : bağımsız durum sayısı

L : simetrimin bağımsız durum sayısı

l : simetrimin bağımlı durumlarından önce bulunan bağımsız durum sayısı

L : simetrimin bağımlı durumlarından sonra bulunan bağımsız durum sayısı

k : simetrimin bağımlı durumları arasındaki bağımsız durumların sayısı

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

l : ilgilenilen bağımlı durumun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası

l : simetrimin ilk bağımlı durumunun, bağımlı olasılık farklı dizilimsiz dağılımın son olayı için sırası. Simetrimin sonuncu bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlardaki sırası

l_i : simetrimin son bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası. Simetrimin birinci bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlardaki sırası

l_s : simetrimin ilk bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz

dağılımlardaki sırası. Simetrimin sonuncu bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlardaki sırası

l_{ik} : simetrimin aranacağı durumdan önce bulunan bağımlı durumun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası veya simetrimin iki bağımlı durumu arasında bağımsız durum bulunduğu, bağımsız durumdan önceki bağımlı durumun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası

l_{sa} : simetrimin aranacağı bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası. Simetrimin aranacağı bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlardaki sırası

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

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

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

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

durum arasında bağımsız durumun bulunduğu 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

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

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

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

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

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

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

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

$f_Z S_{j_s}^{iS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin durumuna bağlı ilk simetrik olasılık

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$f_{Z,0} S_{j_s,j_i,0}^{iS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı

durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$f_{Z,0} S_{j_s,j_i,D}^{iS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

${}^0 S_{j_s,j_i}^{iS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

${}^0 S_{j_s,j_i,0}^{iS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

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durumunun bulunabileceği olaylara göre ilk simetrik olasılık

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durumunun bulunabileceği olaylara göre ilk simetrik olasılık

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göre herhangi bir ve son durumuna bağlı ilk düzgün olmayan simetrik olasılık

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${}^0 \overset{ISO}{\Rightarrow}_{j_s, \Rightarrow j_{ik}, j^{sa}, j_i, 0}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir

bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı ilk düzgün olmayan simetrik olasılık

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E2

BAĞIMLI ve BİR BAĞIMSIZ OLASILIKLI FARKLI DİZİLİMSİZ DAĞILIMLAR

Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Dağılımlar

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

bu yüğe sıralanmasıyla elde edilebilen kurallı tablolar kullanılmaktadır. Farklı dizilimsiz dağılımlarda durumların küçükten-büyükçe sıralama için verilen eşitliklerde kullanılan durum sayısının düzenlenmesiyle, büyükten-küçükçe sıralama durumlarının eşitlikleri elde edilebilir.

Farklı dizilimsiz dağılımlar, dağılımın ilk durumuyla başlayan (bunun yerine farklı dizilimsiz dağılımlarda simetriden seçilen ilk durumuyla başlayan dağılımlar), dağılımın ilk durumu hariçinde dağılımın herhangi bir durumuyla başlayan dağılımlar (bunun yerine farklı dizilimsiz dağılımlarda simetride bulunmayan bir durumuyla başlayan dağılımlar) ve dağılımın ilk durumu hariçinde ilk dağılımının başladığı farklı ikinci durumla başlayıp simetriden seçilen ilk durumuyla başlayan dağılımların sonuna kadar olan dağılımlarda (bunun yerine farklı dizilimsiz 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.

Bağımlı dağılım ve bir bağımsız olasılıklı durumla oluşturulabilen dağılımlara ve bağımlı olasılıklı dağılımların kendi olay sayısından (bağımlı olay sayısı) büyük olasılara (bağımsız olay sayısı) dağılımlarla bağımlı ve bir bağımsız olasılıklı dağılımlar elde edilir. Farklı dizilimsiz dağılımlarda, bu dağılımlara bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlar elde edilir. Bağımlı ve bir bağımsız olasılıklı dağılımlar; bağımlı dağılımlara, bağımsız durumlar ilk durumdan dağıtılmaya başlanarak tabloları elde edilir. Bu bölümde verilen eşitlikler, bu yöntemle elde edilen kurallı tablolara göre verilmektedir. Farklı dizilimsiz dağılımlarda durumların küçükten-

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 eşitlikleri verilmektedir.

Farklı dizilimsiz dağılımlarda simetrinin durumlarının olasılık dağılımındaki sırasına göre 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 durumlarının bulunabileceği olaylara göre çıkarılan eşitlikler kullanılmaktadır. Bu eşitlikler, bir bağımlı ve bir bağımsız olasılıklı dağılımlar için VDO ve Çift Çıkartma ile çıkarılan eşitliklerle birleştirilerek, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımların yeni eşitlikleri elde edilecektir. Eşitlikleri adlandırılmasında bağımlı olasılıklı farklı dizilimsiz dağılımlarda kullanılan adlandırmalar kullanılacaktır. Bu adlandırma 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/bağımsız-bağımsız/bağımsız-bağımsız” kelimeleri getirilerek, simetrinin bağımlı durumlarının bulunabileceği olaylara göre bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz adları elde edilecektir. Simetriden seçilen durumların bulunabileceği olaylara göre simetrik, düzgün simetrik veya düzgün olmayan simetrik olasılık için birden fazla ad kullanılması durumunda gerekmedikçe yeni tanımlama yapılmayacaktır.

Simetrinin durumlarının bağımlı olasılık farklı dizilimsiz dağılımlardaki sırasına göre verilen eşitliklerdeki toplam ve sınırlı sınır değerleri, simetrinin küçükten-büyükçe 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-küçükçe sıralanan dağılımlar için de simetrik olasılık eşitlikleri elde edilecektir.

Bu şekilde bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılığın eşitlikleri verilmektedir.

SİMETRİDEN SEÇİLEN ÜÇ DURUMA GÖRE İLK DÜZDÜN OLMAYAN SİMETRİK OLASILIK

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

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

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

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

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

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

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

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

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

$$f_z S_{j_s, j_{ik}}^{(i)} = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{j_{ik}=j_i+j_s}^{()} \sum_{j_i=l_i+n-D}^{()}$$

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

$$\sum_{n_{is}+j_s+l_k-l_{k_1}}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

$$\geq n < n \wedge l_s > D - 1 \wedge$$

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

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

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

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

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

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$$

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

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

$$fz \mathcal{S}_{j_s, j_{ik}, j_i} = \sum_{k=1}^{\binom{(\cdot)}{(j_s=j_{ik}-j_{sa}^{ik}+1)}} \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(n)} (j_i=l_i+n-D-1) \dots$$

$$\frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{\binom{(\cdot)}{(j_s=j_{ik}-j_{sa}^{ik}+1)}} \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(n)} (j_i=l_i+n-D)$$

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

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

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

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

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

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

$$\begin{aligned}
& \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(j_s - 2)!}{(j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + \dots - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(\dots)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\dots)} \\
& \sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
\end{aligned}$$

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

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

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

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

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

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

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

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

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - k_2)}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - l_i - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

$$l_s \wedge l_s > D - n + 1 \wedge$$

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

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

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

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

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

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

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

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

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

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

$$\sum_{j_i=l_i+n-D}^{n} \sum_{j_i=l_i+n-D}^{()}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{\Delta} \sum_{(n_s=n-j_i+l_{k_2})}^{\Delta} \sum_{(n_{is}=n+l_{k_2}-j_{ik}+1)}^{\Delta} \sum_{(n_{ik}+j_{ik}-n_s-j_i)}^{\Delta}$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

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

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

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

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

$$\begin{aligned}
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - n - 1)! \cdot (n - j_i)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(j_s - 2)!}{(j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
\end{aligned}$$

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

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

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

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

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

$$\sum_{k=0}^{(n-s+1)} \sum_{l=D-s+1}^{(n-s+1)}$$

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

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

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-k_2)}^{(n-s+1)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

$$n \geq n_s \wedge l_s > D - n + 1 \wedge$$

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

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

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

$$(D \geq n < n \wedge I = k) \geq 0 \wedge$$

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

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

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

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

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

$$\begin{aligned}
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{n}{j_i=j_{ik}+s-j_{sa}^{ik}}} \\
& \sum_{n_i=n+l_k} \sum_{\binom{n_i-j_s+1}{n_{is}=n+l_k-j_s+1}} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1} \sum_{\binom{n_{ik}+j_{ik}-j_i-l_{k_1}}{n_s=j_i+1}} \\
& \frac{\binom{n_i-1}{j_s-2} \binom{n_i-n_{is}+1}{n_{is}-n_{ik}-1}}{(j_s-2)! \binom{n_i-n_{is}+1}{n_{is}+j_s-n_{ik}-j_{ik}}!} \\
& \frac{\binom{n_{is}-n_{ik}-1}{j_{ik}-j_s-n_{is}+1}}{(j_i-1)! \binom{n_{ik}+j_{ik}-n_s-j_i}{n_s}} \\
& \frac{(n_i-1)!}{\binom{n_s}{j_i-n-1}! \cdot (n-j_i)!} \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
& \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \\
& \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
& \sum_{k=1} \sum_{\binom{n-s+1}{j_s=l_i+n-D-s+1}} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{()}{j_i=j_{ik}+s-j_{sa}^{ik}}} \\
& \sum_{n_i=n+l_k} \sum_{\binom{n_i-j_s+1}{n_{is}=n+l_k-j_s+1}} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}}
\end{aligned}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{n_{ik} = n_s + j_s - j_{ik} - k_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - k_2)}^{(n)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

$$n \leq l_s \wedge l_s > D - n + 1 \wedge$$

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

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

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

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

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

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

$$s = 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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

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

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

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

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

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(\)} \sum_{(n_{ik}+j_{ik}-j_i=l_{k_2})}^{(\)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - j_{sa}^s)!}$$

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

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

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

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

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

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_i \wedge l_i + j_s - s = l_{k_1} \wedge$$

$$(D - l_i) < n \wedge l = l_{k_1} = 0 \wedge$$

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

$$s: \{j_{sa}^{ik}, j_{sa}^{ik}, l_{k_2}, j_{sa}^s\} \wedge$$

$$s = 3 \wedge s = j_{sa}^{ik} + l_{k_2} \wedge$$

$$l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$fzS_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_i)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}-1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!(n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_s-n-j_i-1)!}{(j_i-n-1)!(n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_{ik}-l_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n-s+1)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n-s+1)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(n-s+1)} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(n-s+1)} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

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

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

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

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

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

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

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

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

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

$$\begin{aligned} & \sum_{j_{ik}=j_{sa}^{ik}-s}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{(n)} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\ & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \end{aligned}$$

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

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

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

$$\sum_{n+l_k}^{n+l_k} \sum_{(n_{is}=n_{is}+1)}$$

$$()$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

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

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

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

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

$$(D \geq n < n - l_s = l_k > 0 \wedge$$

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

$$s: \{j_{sa}^s, l_{k_1}, l_{k_2}, j_{sa}^i\} \wedge$$

$$s = s \wedge s = s + l_k \wedge$$

$$l_{k_z}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

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

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

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

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=j_{ik}+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})}$$

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

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

$$\frac{(n_s-1)!}{(j_i-1)! \cdot (l_{ik}+j_{ik}-n_s-j_i)!}$$

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

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

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

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

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

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

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

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

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{\lfloor \frac{n - l_i + 1}{2} \rfloor} \sum_{s=1}^{\lfloor \frac{n - l_i + 1}{2} \rfloor} \binom{n - l_i + 1 - k - s}{k} \binom{n - l_i + 1 - k - s}{s}$$

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

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

$$\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}$$

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

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

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

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

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

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

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

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

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

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

$$\sum_{(n_{ik}=n_{is}-j_{ik}-l_{k_1})} \sum_{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_j + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n_j + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

$$D \geq n < n \wedge l_s > 0 - n + 1 \wedge$$

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{n_{ik} = n + l_{k_2} - j_{i_2} + 1}^{n_{is} + j_s - j_{ik} - j_{i_2} + j_{i_2} - l_{k_2}} \sum_{(n_s = n - j_i + 1)}$$

$$\frac{(n_i - n_{i_2} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

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

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

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

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

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

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

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

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

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

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

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

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

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

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

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

$$\frac{\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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

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

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

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

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

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

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

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

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

$$\begin{aligned} f_{z, s}^{j_{ik}, j_i} &= \sum_{k=1}^{(l_i + n - D - s)} \sum_{(j_s = l_s + n - D)} \\ &\sum_{j_{ik} = l_{ik} + n - D}^{n + j_{sa}^{ik} - s} \sum_{(j_i = l_i + n - D)}^{(n)} \\ &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\ &\sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \end{aligned}$$

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - j_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(n-s+1)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(n-s+1)} \frac{(n-s+1)!}{(j_i + j_{sa}^{ik} - 1)! \cdot (j_i - j_{ik} - s + 1)!} \cdot \\
& \sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)} \frac{(n_i - j_s + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

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

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

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

$$\sum_{i=l_i+n-s+1}^{s+1}$$

$$\sum_{j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{n_i+l_{ik} \leq j_i \leq n_i+l_{ik}+1}$$

$$\sum_{n_i+l_{ik} \leq j_i \leq n_i+l_{ik}+1}$$

$$\sum_{n_i+l_{ik} \leq j_i \leq n_i+l_{ik}+1}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

$$D \geq n < n \wedge l_s > D - 1 \wedge$$

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

$$j_{ik} + s - j_s \leq j_i \leq n \wedge$$

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

$$(D \geq n < n \wedge l_s > D - 1 \wedge$$

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

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + l_{k_1} \wedge$$

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

$$fz^{\mathcal{S}_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)}$$

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

$$\sum_{n_i=n}^n \sum_{(n_i=j_s+1)}^{(n+j_s+1)}$$

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

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

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

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

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

$$\frac{\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot$$

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

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

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

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

$$\frac{(l_i+j_{sa}-l_{ik}-s)!}{(j_{ik}+l_i-j_{sa}-l_{ik})! \cdot (l_i+j_{sa}-j_{ik}-s)!} \cdot$$

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

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

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

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

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(j_s)}$$

$$\frac{(n_i+2 \cdot j_s+j_{sa}^{ik}-j_{ik}-j_i-l_{k_1}-l_{k_2}-2 \cdot j_{sa}^s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+2 \cdot j_s+j_{sa}^{ik}-j_{ik}-j_i-2 \cdot j_{sa}^s)!} \cdot$$

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

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

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

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

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

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

$$(D \geq n < n \wedge l = k > = 0 \wedge$$

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \sim j_{sa}^{ik}, j_i} = \sum_{k=1}^{()} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

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

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

$$\sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)}$$

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

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

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

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

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

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

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

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-k} \sum_{(n_{ik}+j_{ik}-j_i^l)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - k_2 - 2 \cdot j_{sa}^s)!}$$

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

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

$$D \geq n < n \wedge l_s > D - n \wedge$$

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

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

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

$$(D \geq n < n \wedge l_s = 0 \wedge$$

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}^l\} \wedge$$

$$s = 3 \wedge s = k_1 + k_2 \wedge$$

$$z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

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

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

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

$$\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_1)}$$

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

$$\frac{(n_s-n_s-1)!}{(j_i-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!}$$

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

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

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

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

$$\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}$$

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$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{()} \sum_{(j_s = j_{ik} + l_s - l_{ik})} \\
& \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{n + j_{sa}^{ik} - s} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{()} \\
& \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - k_2)}^{()} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

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

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

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

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

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

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

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

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

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

$$\begin{aligned}
 & f_z S_{j_s} \sum_{k=1}^{(l_i+n-D-s)} \sum_{j_{sa}^{ik}=j_s+l_{ik}-l_s}^{(n)} (j_{sa}^{ik}+1) \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}
 \end{aligned}$$

$$\begin{aligned}
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)} \\
& \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
& \sum_{i=n+l_k}^n \sum_{(n_{is}=n_{is}+1)}^{(n_{is}+1)} \\
& \frac{(n_{is}+j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-l_{ik}-1)!}{(n_{is}+l_k-1)! \cdot (n_{is}-1)!} \cdot \frac{(n_{is}+j_s-1)!}{(n_{is}-j_s+1)!} \\
& \frac{(n_{is}-n_{ik}-1)!}{(n_{is}-j_s-1)!} \cdot \frac{(n_{is}+j_s-n_{ik}-j_{ik})!}{(n_{is}-n_{ik}-1)!} \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
& \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
& \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)} \\
& \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}
\end{aligned}$$

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

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

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

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

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

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

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

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

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

$s \geq 3 \wedge s = \mathbb{k}_1 + \mathbb{k}_2 \wedge$

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

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

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

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

$$\begin{aligned}
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(j_s - 2)!}{(j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)} \\
& \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
\end{aligned}$$

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

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

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

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

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

$$\sum_{k=0}^{(n-s+1)} \sum_{l=0}^{(D-s+1)}$$

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

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

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}^{(n-s+1)} \sum_{(n_s=n_{ik}+j_{ik}-j_i-k_2)}^{(n-s+1)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

$$j_s \geq n - 1 \wedge l_s > D - n + 1 \wedge$$

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

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

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

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

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

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

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

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

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

$$\sum_{(j_{ik}+l_{ik}-l_i)}^{(j_{ik}+l_{ik}-l_i)} \sum_{(j_s+1)}^{(n-j_s+1)}$$

$$\sum_{n_i=n+l_s}^{n} \sum_{(j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=l_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

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

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

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

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

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

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

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

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

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

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

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_s-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - 2 \cdot j_s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - 2 \cdot j_s)!} \cdot \frac{(l_s - 2)!}{(l_s - 2)! \cdot (j_s - 2)!} \cdot \frac{(D - j_s - n - l_i)! \cdot (n - j_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

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

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

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

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

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

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

$s: \{l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_s\} \wedge$

$l_{k_2} = 3 \wedge l_{k_1} = s + l_k \wedge$

$l_{k_2}: z = 2 \wedge l_{k_1} = l_{k_2} + 1 \Rightarrow$

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

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

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{sa}^{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{\binom{()}{j_i=j_{ik}+l_i-l_{ik}}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}
\end{aligned}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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

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

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

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

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

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

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

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

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

$$f_{z=2}^{s, j_{ik}, j_i} = \sum_{k=1}^{(l_i + n - D - s)} \sum_{(j_s = l_s + n - D)}$$

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

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

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

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

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

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

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_s=l_i+n-D-s}^{(n-s)} \sum_{j_{ik}=j_{sa}^{ik}-s}^{(j_{ik}+j_{sa}^{ik}-1)} \sum_{(j_i=j_{ik}-l_i-l_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_i=n+l_k}^{n-s-j_{ik}-k_1} \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n-s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_i-j_s+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

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

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

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

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-1}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik})! \cdot (n_{ik} - k_2 + 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - 1)! \cdot (n + 2 \cdot j_{sa}^{ik} - j_{ik} - 1)! \cdot (2 \cdot j_{sa}^s)!}$$

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

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

$D \geq n < n \wedge l_s > D - n - 1 \wedge$

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

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

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

$(D - n < n \wedge I = k_1 = 0 \wedge$

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

$s: \{j_s^s, k_1, j_{sa}^{ik}, j_i^s\}$

$s = 3 \wedge s = s + k \wedge$

$k; z = 2, k = k_1 + k_2 \Rightarrow$

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

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{\binom{n}{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}} \sum_{n_i=n+l_k}^n \sum_{\binom{n_i-j_s+1}{n_{is}=n+l_k-j_s+1}} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{\binom{n_{ik}+j_{ik}-j_i-l_{k_1}}{n_s=n_{ik}+j_{ik}+1}} \frac{\binom{n_i-1}{j_s-2} \binom{n_i-n_{is}-1}{n_i-n_{is}+1}}{\binom{n_{is}-n_{ik}-1}{(j_{ik}-j_s)(n_{is}+j_s-n_{ik}-j_{ik})}} \frac{\binom{n_i-1}{j_i-1} \binom{n_i-n_{ik}-n_s}{n_{ik}+j_{ik}-n_s-j_i}}{\binom{n_i-1}{(n_s-j_i-n-1) \cdot (n-j_i)}} \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_{ik}-j_s-l_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

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

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

$$\sum_{n_i=n+l_k}^n \sum_{\binom{n_i-j_s+1}{n_{is}=n+l_k-j_s+1}}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{\binom{)}{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - l_{k_1}} \sum_{(n_s = n_{ik} + j_{ik} - j_i - l_{k_2})}^{(j_s - j_s + 1)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

$$n \leq l_s \wedge l_s > D - n + 1 \wedge$$

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

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

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

$$\begin{aligned}
 & \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(n-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \frac{n_{is}+j_s-j_{ik}-l_{ik}+1}{n_{ik}=n+l_{k_2}-j_{ik}-1} \cdot \frac{j_{ik}-j_s-l_{ik}+1}{(n_s=n-j_i+1)} \\
 & \frac{(n_s-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \\
 & \frac{(n_{is}-j_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_s-n-1)!}{(n_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(n-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{()} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

$$l_i \leq D + s - n \wedge$$

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

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

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

$$s = 3 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_2 = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

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

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - l_i - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i - s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{l_{ik}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \\
& \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik}} \sum_{(j_i = l_{ik} + s - j_{sa}^{ik} + 1)}^{(l_i)} \\
& \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

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

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

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

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

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

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

$$\sum_{n_{is}=n_{ik}-l_{k_1}}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()} (n_s=n_{ik}+j_{ik}-j_i-l_{k_2})$$

$$\frac{(n_i + 2 \cdot j_s + j_{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n_{ik} - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

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

$$j_{ik} + s - j_s \leq j_i \leq n \wedge$$

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

$$l_i \leq D + s - n \wedge$$

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \sum_{j_i+j_{sa}^{ik}-(l_s+s-1)}^{j_{ik}-j_{sa}^{ik}+1} \sum_{j_{ik}-j_{sa}^{ik}+1}^{(n_i-j_s+1)} \sum_{n+l_k}^{(n+l_k-j_s+1)} \sum_{n_{is}=j_{ik}-k_1}^{j_i-k_2} \sum_{n+l_k-j_{ik}+1}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \sum_{j_i+j_{sa}^{ik}-(l_s+s-1)}^{j_{ik}-j_{sa}^{ik}+1} \sum_{j_{ik}-j_{sa}^{ik}+1}^{(n_i-j_s+1)} \sum_{n+l_k}^{(n+l_k-j_s+1)} \sum_{n_{is}=j_{ik}-k_1}^{j_i-k_2} \sum_{n+l_k-j_{ik}+1}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=l_s+s)}^{(l_i)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
& \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-2)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
& \frac{(n_s-n_{ik}-1)!}{(j_i-l_{k_2}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \\
& \frac{(n_s-j_i-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
& \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \\
& \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
& \sum_{k=1}^{\binom{()}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{()}{}} \\
& \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-1)} \sum_{(j_i=s+1)}^{\binom{()}{}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{\binom{()}{}}
\end{aligned}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

$$l_i \leq D + s - n \wedge$$

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

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

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

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

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

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

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

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

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

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

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_s=1}^{l_{ik}} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_{ik}-j_{sa}^{ik}+1} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(j_i=j_{ik}+s-j_{sa}^{ik})} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

$$l_i \leq D + s - n \wedge$$

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

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

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

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

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

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

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

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

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

$$\sum_{n+k}^{(n_i + 1)} (n_i + k) \dots$$

$$\sum_{(j_i = n_{is} + \dots - k_1)}^{(\)} \dots$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

$$D \geq n < n \wedge l_s > \dots \wedge l_s \leq D - n + \dots \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge \dots + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

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

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

$$l_i \leq D + s - \dots \wedge$$

$$(D \geq n - \dots \wedge I = k \geq 0 \wedge$$

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

$$s: \{j_{sa}^i, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz^{\mathcal{S}}_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(l_{ik} - j_{sa}^{ik} + 1)}$$

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

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

$$\sum_{n_{ik}=n+k_2-j_{ik}-1}^{(n_i+j_s-j_{ik}-j_{sa}^{ik}+j_{ik}-k_2)} \sum_{(n_s=n-j_i+1)}^{(n_i+j_s-j_{ik}-j_{sa}^{ik}+j_{ik}-k_2)}$$

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

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

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

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

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

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

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

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

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

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

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{(\cdot)}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

$$l_i \leq D + s - n \wedge$$

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

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

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

$$s = 3 \wedge s = s + 1 \wedge$$

$$\mathbb{k} : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + 1 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1} \sum_{\binom{(l_s)}{j_s=2}}$$

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

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

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

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - l_i - s)! \cdot (j_i + j_{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{(l_s)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$(n_i - j_s + 1)$$

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

$$\sum_{(j_s = j_{ik} - l_{k_1})}^{n_{is} + j_s - j_{ik} - l_{k_1}} \sum_{(j_i = j_{ik} - l_{k_2})}$$

$$\sum_{(j_s = j_{ik} - l_{k_2} - j_{ik})}^{n_{is} + j_s - j_{ik} - l_{k_2} - j_{ik}} \sum_{(n_s = n - j_i + 1)}$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

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

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

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

$D + n < l_i \leq D - l_{ik} + s - n - j_{sa}^{ik}$

$(n \geq n < n \wedge \mathbb{k} = \mathbb{k} \geq \mathbb{k})$

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

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

$s = 3 \wedge s = s$

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

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

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

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_s - j_{ik})!} \cdot \\
& \frac{(n_s - j_i - n - l_s - 1)!}{(n_s - j_i - n - l_s - 1 - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{ik} - l_{ik} - s)!}{(j_{ik} + l_{k_2} - j_i - l_{k_2})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^s \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(n)} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=l_s+s)}^{(n)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_s=1}^{l_s} \sum_{j_{ik}=j_{ik} - j_{sa}^{ik} + 1}^{j_{ik} - j_{sa}^{ik} + 1} \\
& \sum_{j_{ik}=j_i + j_{sa}^{ik} - s}^{l_s + s - 1} \sum_{j_i=l_i + n - D}^{(l_s + s - 1)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(\quad)} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_{is}+1)}$$

$$\sum_{n_{ik}+l_{k_2}-j_{ik}}^{n_{is}+j_s-j_{ik}-l_{k_2}} \sum_{(j_i=j_{ik}+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

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

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

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

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

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

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

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

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

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

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

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$$

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

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

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

$$D + s - n < l_i \leq D + l_i - s - n - j_{sa}^{ik}$$

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

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

$$s = \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}^i, j_{sa}^s\}$$

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

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

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

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

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

$$\begin{aligned}
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - n - 1)! \cdot (n - j_i)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(j_s - 2)!}{(j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
\end{aligned}$$

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

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

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

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

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

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

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

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

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

$$l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

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

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

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

$$\begin{aligned}
 & f_z^s j_s j_{ik} j_i \sum_{k=1}^{(n-D-s)} \sum_{j_i=j_s+\mathbb{k}}^{(n)} \sum_{j_{ik}=j_s+\mathbb{k}}^{(n)} \sum_{j_{is}=n+\mathbb{k}}^{(n)} \sum_{j_{ik}=j_s+\mathbb{k}}^{(n)} \sum_{j_{is}=n+\mathbb{k}}^{(n)} \sum_{j_{ik}=j_s+\mathbb{k}}^{(n)} \sum_{j_{is}=n+\mathbb{k}}^{(n)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-j_{sa}^{ik}+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{sa}^{ik}-1}^{(n_i+j_s-j_{ik}-j_{sa}^{ik}-j_{sa}^{ik_2})} \sum_{(n_s=n-j_i-j_{sa}^{ik_2})}^{(n_i+j_s-j_{ik}-j_{sa}^{ik}-j_{sa}^{ik_2})} \\
& \frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_i-n_{ik}-j_s+1)!} \\
& \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \\
& \frac{(n_i-n_s-1)!}{(n_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
& \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \\
& \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
& \sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-j_{sa}^{ik}+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
\end{aligned}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_s \wedge$$

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

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

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

$$s = 3 \wedge s = s + 1 \wedge$$

$$\mathbb{k}: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + 1 \Rightarrow$$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

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

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

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

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - l_i - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-k-s+1)}^{(l_s)} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(l_s)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_s)} \sum_{(n_{is}+k)}^{(l_s)} \sum_{(n_{is}=n+k-j_s+1)}^{(l_s)} \sum_{(n_{is}+j_{sa}^{ik}-k-k_1)}^{(l_s)} \sum_{(n_s=n_{ik}+j_{ik}-j_i-k_2)}^{(l_s)} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

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

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

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

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

$$(D \geq n < n \wedge I = k \geq 0 \wedge$$

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(l_s + s - j_{ik} - j_{sa}^{ik} - j_{i=s+1})} \sum_{(n_i - j_{ik} - k)}^{(n_i - j_{ik} - k_1 - j_{ik} - j_{i-k_2})} \sum_{(n_{ik} = j_{ik} - j_{ik} + 1)}^{(n_{ik} - j_{ik} + 1)} \frac{(n_{ik} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{ik} - n_{is} - j_s + 1)!} \cdot \frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_i)} \sum_{j_{ik} = j_i + j_{sa}^{ik} - s}^{(l_i)} \sum_{(j_i = l_s + s)}$$

GÜLDÜZMÜŞA

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_s - j_{ik})!} \cdot \\
& \frac{(n_s - j_i - n - j_{ik} - 1)!}{(n_s - j_i - n - j_{ik} - 1 - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{\binom{()}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{()}{}} \\
& \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{\binom{()}{}} \sum_{(j_i=s+1)}^{\binom{()}{}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\binom{()}{}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{\binom{()}{}} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot
\end{aligned}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

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

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

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

$$fz \mathcal{D}_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_s-2)}$$

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

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

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

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

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

$$\begin{aligned}
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(n - l_i)!}{(D + j_{ik} - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{j_s=2}^{(l_s)} \sum_{j_{ik}=l_s+j_{sa}^{ik}}^{(n)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(n)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

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

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

$$\sum_{n_{ik}=n+k_2-1}^{n_{is}+j_s-j_{ik}} \sum_{(n_{ik}+j_{ik}-n_{i-k_2})}^{(n_i+j_{ik}-n_{i-k_2})}$$

$$\frac{(n_i - n_{i-k_2} - 1)!}{(j_s - 2)! \cdot (n_{i-k_2} - j_s + 1)!}$$

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

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

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

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

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

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

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

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

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

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

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

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

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

$$s = 3 \wedge s = s + 1 \wedge$$

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

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

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

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

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

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_s - j_{sa} - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(l_s)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_s+s)}^{(n)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

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

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

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

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

$$\sum_{j_{ik}=j_i+j_s}^{()} \sum_{(j_i=l_i+n-D)}^{()}$$

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

$$\sum_{=n_{is}+j_{ik}-l_{k_1}}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

$$\geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

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

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

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

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge I = l_k \geq 0 \wedge$$

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

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

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

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$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_s - j_{ik})!} \cdot \\
& \frac{(n_s - j_i - n - j_{ik} - 1)!}{(n_s - j_i - n - j_{ik} - 1 - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{\binom{D}{j_s}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{D}{j_s}} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{\binom{D}{j_s}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{\binom{D}{j_s}} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}
\end{aligned}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

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

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

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

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

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

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_i + n - D - s)} \sum_{(j_s=2)}$$

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

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

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

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

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

$$\begin{aligned}
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(n - l_i)!}{(D + j_{ik} - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=0}^{(l_s)} \sum_{l=0}^{(D-s+1)} \sum_{j_i=j_s+j_{sa}^{ik}-1}^{n_{ik}-s} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(n)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

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

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

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

$$\sum_{k_1=0}^{n} \sum_{(n_{is}=n-k_1+1)}$$

$$\sum_{(n_{ik}=n_{is}+j_{ik}-k_1-k_2-j_i-k_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n - 1 \wedge$$

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

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

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

$$D + s - n < 0 \leq D + j_i + s - n - 1 \wedge$$

$$(D - n - n \wedge I = k \geq 0 \wedge$$

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

$$s \in \{j_{sa}^{ik_1}, j_{sa}^{ik_2}, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_{z^S}^{S_{j_s, j_{ik}, j_i}} &= \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)} \\
 &\sum_{j_{ik}=j_i + j_{sa}^{ik} - s}^{(l_s + s - 1)} \sum_{(j_i=l_{ik} + n + s - D - j_{ik})}^{(l_s + s - 1)} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_i-j_s+1)} \sum_{(n_s=n-j_i+1)}^{(n_i-j_s+1)} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} - j_s + 1)!} \\
 &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \\
 &\frac{(n_i - n_s - 1)!}{(n_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 &\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
 &\sum_{j_{ik}=j_i + j_{sa}^{ik} - s}^{(n)} \sum_{(j_i=l_s + s)}^{(n)} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\frac{\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot$$

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

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

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

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

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

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

$$f_{zS} j_{ik} j_i = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

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

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

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

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

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

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

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{(l_s)} \binom{l_s}{j_s} \cdot \\
& \sum_{j_{sa}^{ik} = l_s + j_{sa}^{ik} - s}^{n + j_{sa}^{ik} - s} \binom{(\cdot)}{j_{sa}^{ik}} \cdot \\
& \sum_{n_i = n + k}^{n_i - j_s + 1} \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \cdot \\
& \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\sum_{k=1}^{\binom{D}{j_s}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{D}{j_s}} \sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{\binom{D}{j_i}} \sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{\binom{D}{n_{ik}}} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-l_{k_2})}^{\binom{D}{n_{ik}}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (2 \cdot j_s - j_{sa}^{ik} - j_{ik} - l_{k_2} - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq n - n + 1 \wedge$$

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

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

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

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

$$(D \geq n < n \wedge I = l_k > 0 \wedge$$

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

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^s, l_{k_2}, j_{sa}^s\} \wedge$$

$$2 \wedge l_{k_2} = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

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

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

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

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s-j_s-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})}$$

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

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

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

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

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

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

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

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

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

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$$\frac{\sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\mathbf{n} + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{ik}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}\} \wedge$$

$$s = s, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2, \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i + j_{sa}^{ik} - s} \sum_{(j_i=s+1)}^{(l_s + s - 1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s + 1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(j_s - 2)!}$$

$$\frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} - j_i - l_{ik} - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=l_s+s)}^{(l_i)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa} + 1)!}$$

$$\frac{(l_s + j_{sa}^{ik} - l_{ik} - j_s)!}{(j_{ik} + l_i - j_{ik} - l_s)! \cdot (j_i + j_{sa} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_i + j_{sa}^{ik} - s}^{(l_s + s - 1)} \sum_{(j_i = s + 1)}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - k_2)}^{(\)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1) \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + 1 \wedge$$

$$\mathbb{k}: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_i)}^{(l_i)} (j_i = j_{ik} + s - j_{sa}^{ik})$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(l_s - j_s - 1)!} \cdot \\
& \frac{(l_{jk} - l_s - j_{sa} + 1)!}{(j_s + l_{jk} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
& \sum_{j_{ik}=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot
\end{aligned}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - l_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{l_s - j_{sa}^{ik} - 1} \binom{()}{j_{sa}^{ik+1}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s - j_{sa}^{ik} - 1} \binom{()}{(j_i = j_{ik} + s - j_{sa}^{ik})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \binom{()}{(n_s=n_{ik}+j_{ik}-j_i-k_2)}$$

$$\frac{(n_i - n - k_1 - k_2)! \cdot (n_i - 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(n_i - n - k_1 - k_2) < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2)$$

$$fz^S j_s, j_{ik}, j_i = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{sa}^{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_i=j_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k2})}^{(j_i=j_{ik}+s-j_{sa}^{ik})}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k1} - l_{k2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k1} - l_{k2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$f_{s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j_i + j_{sa}^{ik} - s} \sum_{(j_i=l_i+n-D)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot$$

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - l_{ik} - s)!} \cdot \\
& \frac{(D - j_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{j_s=2}^{(l_s)} \sum_{j_{ik}=l_{ik}+n-D}^{(n)} \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1, \dots)}$$

$$\dots + s - 1)$$

$$\sum_{j_i = j_i + j_{sa}^{ik} - l_{ik} - D)$$

$$(n_i - j_s + 1)$$

$$\sum_{l_k} \sum_{(n_i - j_s + 1 + k - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} - j_{ik} - k_1} \sum_{(n_{ik} + j_{ik} - j_i - k_2)}$$

$$\frac{(n_j + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{ik} - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2)! \cdot (n_j + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n > l_i \leq D + l_s + s - n - 1) \vee$$

$$(D < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz S_{j_s, j_i} = \sum_{k=1}^{(j_s - j_{sa}^{ik} + 1)} \frac{(j_s - j_{sa}^{ik} + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{(j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_{ik}+1)}$$

$$\frac{(n_{is}+j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-l_{ik}-1)!}{(n_{ik}+l_k-1)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{ik}-1)!}{(j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_i)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{()} \sum_{(n_s=n_{ik}+j_i-j_{i_2})}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^i)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - j_{sa}^i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1) \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_i \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1) \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2}) \Rightarrow$$

$$\begin{aligned}
 f_{z^S}^{j_s, j_{ik}, j_i} &= \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{(n)} \\
 &\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}} \sum_{(j_i=l_i+n-D)}^{(n)} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=k-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n+k_2}^{n_{is}+j_s-j_{ik}} \sum_{(n_{ik}+j_{ik}-i-k_2)}^{(n_{ik}+j_{ik}-i-k_2)} \\
 &\sum_{(n_s=n-j_i)}^{n_{ik}=n+k_2+1} \sum_{(n_s=n-j_i)}^{(n_{ik}+j_{ik}-i-k_2)} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik})!} \\
 &\frac{(n_{ik} - n_s - 1)!}{(n_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 &\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 &\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)} \\
 &\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_s - j_{ik})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{sa}^{ik} - j_{sa}^{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} - l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^s \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()}
 \end{aligned}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) =$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(l_i)} \sum_{(j_i=s)}^{(l_i)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(l_i + j_{sa}^{ik} - j_i - l_{ik})! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)} \sum_{i=1}^{(\cdot)} \sum_{i=s}^{(\cdot)} \sum_{n_i=n+l_k}^n \sum_{(j_{ik}=j_i+l_k-1)}^{(\cdot)} \sum_{n_s=0}^{(\cdot)} \sum_{(j_{ik}-j_i-l_{k_2})}^{(\cdot)} \frac{(n_i + j_s + j_{sa}^{ik} - j_i - l_{ik} - l_{k_2} - l_{k_1})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D - s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_s = -n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_s + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i < n \wedge$$

$$l_i - j_{sa}^{ik} + l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n$$

$$(D \geq l_i < n \wedge l = l_k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^i, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = j_s + l_k \wedge$$

$$l_{k_2} = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=s)}^{(l_i)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i+l_k}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - j_i - j_{sa}^{ik} - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - j_{ik} - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(j_i - j_{ik})!}{(j_{ik} - j_{ik})! \cdot (j_i - j_{sa}^{ik})!} \cdot \\
& \frac{(D - l_i)!}{(D - n - l_i)! \cdot (n - j_i)!} - \\
& \sum_{k=1}^{()} \sum_{(j_s=1)}^{()} \\
& \sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_i=s)}^{()} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}^{()} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{()} f_z^s j_s j_{ik} j_{sa}^{ik} \dots$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n-k_2-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j_i=s)}^{()}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - \dots)!}$$

$((D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$

$l_i \leq D + s - n) \vee$

$(D \geq n < n \wedge l_s = 1 \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$

$(D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_i + s + 1 > l_s$

$l_i \leq D + s - n) \wedge$

$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} = j_i - 1 \wedge j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$

$= 3 \wedge \dots + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1} \sum_{(j_s=1)} \binom{()}{}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i+l_k}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} - n_s - j_i - j_{ik} + 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - l_k - 1)! \cdot (n - j_i - l_k)!} \cdot \\
& \frac{(l_i - j_{ik})!}{(n_{ik} - j_{ik})! \cdot (n_{ik} - j_{sa}^{ik})!} \cdot \\
& \frac{(n_i + j_{sa}^{ik} - l_k - s)!}{(n_i + l_i - j_i - l_k - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{()} \sum_{(j_s=1)}^{()} \\
& \sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j_i=s)}^{()} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}^{()} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 &= \sum_{j_i = j_{sa}^{ik} + 1}^{(n_i - j_s + 1)} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{(j_i + j_{sa}^{ik} - s)} (l_{ik} + s - j_{sa}^{ik}) \\
 &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
 &\sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}
 \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=l_{ik}+s-j_{sa}^{ik}+1)}^{(l_i)}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n_{ik}+1)}^{(n_{ik}+1)}$$

$$\frac{(n_{is}+j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-l_{ik})!}{(n_{ik}+l_k-1)! \cdot (n_{ik}+j_{ik}-j_i-1)!}$$

$$\frac{(n_{ik}+l_k-2)! \cdot (n_{is}-1)!}{(n_{is}-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(n_{is}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-j_{sa}^{ik})} \sum_{(j_i=s+1)}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}$

$l_i \leq D + s - n$

$(D \geq n < n \wedge l = \mathbb{k} \geq 0)$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1$

$s = (j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik_2}, j_{sa}^i)$

$s = 3 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z: z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \dots \Rightarrow$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=s+1)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
& \sum_{n_{ik}=\mathbf{n}+\mathbf{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbf{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(j_s - 2)!}{(j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + \dots - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=l_s+s)}^{(l_i)} \\
& \sum_{n_i=\mathbf{n}+\mathbf{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbf{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=\mathbf{n}+\mathbf{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbf{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
\end{aligned}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j_i+l_s-l_{ik}}^{(j_i+l_s-l_{ik})} \binom{(j_i+l_s-l_{ik})}{j_{ik}} \binom{(j_i+l_s-l_{ik})}{j_i}$$

$$\sum_{j_{ik}=j_i+l_s-l_{ik}}^{(j_i+l_s-l_{ik})} \binom{(j_i+l_s-l_{ik})}{j_{ik}} \binom{(j_i+l_s-l_{ik})}{j_i}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \binom{(n_{is}+j_s-j_{ik}-l_{k_2})}{n_{ik}}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$j_s > n - 1 \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{i=1}^{\binom{D}{s}} \sum_{j_s=j_{ik}-l_{ik}}^{j_s+l_{ik}} \sum_{j_{ik}=j_{sa}^{ik}+l_{ik}}^{j_{ik}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{j_i} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n_{is}} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{n_{ik}} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_2}^{n_{ik}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{\binom{D}{j_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{D}{j_s}} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{ik}^s)}^{\binom{D}{j_i}} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=l_k-j_s+1)}^{\binom{D}{n_i-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{ik}}^{\binom{D}{n_{ik}}} \sum_{(n_{is}=n_{ik}+j_{ik}-j_{ik}^s)}^{\binom{D}{n_{is}}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik}^s - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik}^s - l_{k_2} - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(n_i - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s = D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{ik} + j_{sa}^{ik} - s \wedge$

$j_{ik} + j_{sa}^{ik} \leq j_i \leq j_{ik} + j_{sa}^{ik} - 1 \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_{ik} \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$

$l_i \leq l_{ik} + s - n \wedge$

$D \geq n < n \wedge l = l_{k_1} + l_{k_2} > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, l_{k_1}, l_{k_2}, j_{sa}^i\} \wedge$

$l_{k_2} = 3 \wedge l_{k_1} = s + l_{k_2} \wedge$

$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{\binom{D}{j_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{D}{j_s}}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-2)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_s-1)!}{(j_i-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\infty)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\infty)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(\infty)}
 \end{aligned}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) =$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{j_{sa}^{ik+1}} \sum_{(j_s=2)}^{(j_s=2)} \\
& \sum_{k=j_s+l_{ik}-l_s}^{(k=j_s+l_{ik}-l_s)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(j_i=j_{ik}+s-j_{sa}^{ik})} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} j_i = \sum_{j_{ik}=j_{ik}-l_s}^{(l_i)} (j_i = j_{ik} + s - j_{sa}^{ik})$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{s+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_{ik}+s-j_{sa}^{ik})}^{(n_{i_s}+1)} \sum_{(n_{i_s}+1)}^{(n_{i_s}+1)} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i - j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n - l_{k_1} - l_{k_2} \leq D + j_i + s - n - 1 \wedge$$

$$(D - n - n \wedge I = l_{k_1} + l_{k_2} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^{ik_1}, j_{sa}^{ik_2}, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + l_{k_1} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$\begin{aligned}
 f_{zS_{j_s, j_{ik}, j_i}} &= \sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)} \\
 &\sum_{j_{ik}=j_{s_a}^{ik}+1}^{j_i+j_{s_a}^{ik}-s} \sum_{(j_i=l_i+n-)}^{(l_{ik}+s-j_{s_a}^{ik})} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n+l_{k_2}-j_{ik_2}+1}^{n_{is}+j_s-j_{ik_2}} \sum_{(n_s=n-j_i+)}^{(n_i+j_{ik_2}-l_{k_2})} \\
 &\frac{(n_i-n_{ik_2}-1)!}{(j_s-2)! \cdot (n_i-n_{ik_2}-j_s+1)!} \cdot \\
 &\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \cdot \\
 &\frac{(n_i-n_s-1)!}{(n_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 &\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
 &\frac{(l_i+j_{s_a}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{s_a}^{ik}-j_{ik}-s)!} \cdot \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)} \\
 &\sum_{j_{ik}=j_{s_a}^{ik}+1}^{l_{ik}} \sum_{(j_i=l_{ik}+s-j_{s_a}^{ik}+1)}^{(n)} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\frac{\sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(j_s - 2)!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa} - j_{ik} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-j_{sa}^{ik})} \sum_{(j_i=l_i+\mathbf{n}-D)}^{()}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\mathbf{n} + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f^z \mathcal{S}_{j_s, j_{ik}}^{j_i} &= \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)} \\ &\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(l_s+s-1)} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\ &\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{()} \frac{()}{(j_s = j_{ik} - l_{ik})} \cdot \\
& \sum_{j_{ik} = l_{ik} + 1}^{l_s + j_{sa}^{ik}} \sum_{(j_i = l_s + s)} \\
& \sum_{n_{is} = l_{ik} + 1}^{(j_s + 1)} \sum_{(n_{is} = n + l_{ik} - j_s + 1)} \\
& \sum_{n_{ik} = l_{ik} - j_{ik} - l_{k_1}}^{(n_{ik} + j_{ik} - j_i - l_{k_2})} \sum_{(n_s = n - j_i + 1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-1)} \sum_{(j_i=l_i+n-p)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-1}^{(\cdot)} \sum_{(n_{is}=n_{ik}+j_{ik}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s = D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + j_{sa}^{ik} \leq j_i \leq j_{ik} + j_{sa}^{ik} - 1 \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_i \wedge l_i + j_{sa}^{ik} - s > l_i \wedge$

$D + 1 - n < l_i \leq D - l_s + s - 1 \wedge$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, \mathbb{k}_2, j_{sa}^i\} \wedge$

$\mathbb{k}_2 = 3 \wedge \mathbb{k}_1 = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(n)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-2)!(n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_s-n_{ik}-1)!}{(j_i-1)!(n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - 1)! \cdot (j_i + j_{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{l_{ik}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{()} \cdot \\
& \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_{ik}} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{()} \cdot \\
& \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \cdot \\
& \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - k_2)}^{()} \cdot \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{()} (j_s = j_{ik} + l_s - l_{ik})$$

$$\sum_{k=j_{sa}^{ik}+1}^{n+j_{sa}^{ik}-l_s-1} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_s = j_{ik} + l_s - l_{ik})} \sum_{(j_i = j_{ik} + l_i - l_{ik})}$$

$$(n_i - j_s + 1)$$

$$\sum_{(j_s = j_{ik} + l_s - l_{ik})} \sum_{(j_i = j_{ik} + l_i - l_{ik})}$$

$$n_{is} + j_{ik} - l_{ik} - 1 \quad (n_{ik} + j_{ik} - l_{ik} - 1)$$

$$\sum_{(j_s = j_{ik} + l_s - l_{ik})} \sum_{(j_i = j_{ik} + l_i - l_{ik})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$(n_{is} - n_{ik} - 1)!$$

$$(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!$$

$$(n_{ik} - n_s - 1)!$$

$$(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!$$

$$(n_s - 1)!$$

$$(n_s + j_i - n - 1)! \cdot (n - j_i)!$$

$$(l_s - 2)!$$

$$(l_s - j_s)! \cdot (j_s - 2)!$$

$$(l_i + j_{sa}^{ik} - l_{ik} - s)!$$

$$(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!$$

$$(D - l_i)!$$

$$(D + j_i - n - l_i)! \cdot (n - j_i)! -$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

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$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_i)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}^{()} \sum_{(n_s=n_{ik}+j_i-j_{ik}-k_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^{ik})!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - j_{ik} = l_{ik} \wedge$$

$$D + n < l_i \leq l_s + s - n - 1 \wedge$$

$$(n \geq n < n \wedge k = k \geq k) \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s$$

$$k_z \cdot z = z \cdot k = k_1 + k_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{()}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_s - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} - j_{i_k} - n_s - j_{i_s})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - j_i)!}{(l_s - 2)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{i_k} - l_{i_k} - s)!}{(j_{i_k} + l_{i_k} - j_{i_s} - l_{i_k})! \cdot (j_i + j_{s_a}^{i_k} - j_{i_k} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^n \sum_{(j_s=l_i+n-D-s+1)}^{(l_{i_k}-j_{s_a}^{i_k}+1)} \\
 & \sum_{j_{i_k}=j_s+l_{i_k}-l_s}^n \sum_{(j_i=j_{i_k}+s-j_{s_a}^{i_k})}^{(n)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik} - s)! \cdot (j_i + j_{sa}^{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=0}^{j_i - l_i - 1} \sum_{i_s = l_i + n - D - s + 1}^{j_i - l_i - k} \binom{D - l_i - k}{i_s} \cdot \\
& \sum_{k=j_s + l_{ik} - l_s}^n \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{(n - j_s + 1)} \sum_{(n_i = n + k)}^{(n_i = n + k - j_s + 1)} \cdot \\
& \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - k_2)}^{(n_i - j_s + 1)} \cdot \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{S_{j_s, j_{ik}}} = \sum_{i=1}^{D-s} \sum_{(j_s=2)}^{(n)} \sum_{j_{ik} = l_{ik} - l_s}^{(n)} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_{ik}+1)}$$

$$\frac{(n_{is}+j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-l_{ik}-1)!}{(n_{ik}+l_k-1)! \cdot (n_{is}-1)!}$$

$$\frac{(n_{is}-2)! \cdot (n_{is}-j_s+1)!}{(n_{is}-1)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(n_{is}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}$

$l_{ik} \leq D + j_{sa}^{ik} - n$

$(D \geq n < n \wedge l = \mathbb{k} \geq 0)$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1$

$s = \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{s+1}, j_{sa}^i\}$

$s = 3 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z: z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=s+1)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbf{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbf{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + \dots - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_i)} \sum_{(j_i=l_s+s)}^{(l_i)} \\
 & \sum_{n_i=\mathbf{n}+\mathbf{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbf{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=\mathbf{n}+\mathbf{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbf{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 1)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i}^{(j_i+l_{ik}-l_i)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{(j_i+l_{ik}-l_i)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i}^{(j_i+l_{ik}-l_i)} \sum_{(j_i=s+1)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(j_i+l_{ik}-l_i)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$j_i > n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz S_{j_s}^{i_k j_i} = \sum_{k=1}^{(j_s - j_{sa}^{ik} + 1)} \sum_{i_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik}} \sum_{i_{is}=n+\mathbb{k}-j_s+1}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik} (j_i=j_{ik}+l_i-l_{i'})}^{l_{ik}} \sum_{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-1}^{n_{is}+j_s-j_{ik}} \sum_{(n_{ik}+j_{ik}-i-k_2)} \\
 & \sum_{(n_s=n-j_i)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_i - n_s - 1)!}{(n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+l_i-l_{i'})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + 1 \wedge$$

$$\mathbb{k}: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{(l_s)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k2})}^{()} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k1} - l_{k2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k1} - l_{k2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} \geq 0) \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{j_{ik}, j_i} = \sum_{k=1}^{j_{ik} - j_{sa}^{ik} + 1} \sum_{(j_s=2)}^{(l_s+s-1)} \sum_{k=j_i+l_{ik}-l_i}^{(j_i=l_i+n-D)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{ik}} \sum_{(j_s+s)}$$

$$(n_i - j_s +$$

$$\sum_{n+l_k} \sum_{n+l_k-j_s+1}$$

$$n_{is} - j_{ik} - k_1 \quad j_i - k_2$$

$$\sum_{n+l_k-j_s+1} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_i+n-D)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+l_{k_2}-j_i-l_{k_2})}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - 2 \cdot j_s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - 2 \cdot j_s)!} \cdot \frac{(l_s - 2)!}{(l_s - 2)! \cdot (j_s - 2)!} \cdot \frac{(D - j_s - n - l_i)! \cdot (n - j_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 < j_{ik} \leq j_s + j_{sa}^{ik} - s$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - 1 = l_{ik} \wedge$$

$$D + j_{ik} - n < l_{ik} \wedge D + l_s + j_{sa}^{ik} - 1 = D - 1$$

$$(n \geq n < n) \wedge l_k > 0 \wedge$$

$$j_{sa}^{ik} - j_{sa}^i - 1 \wedge j_{sa}^s - j_{sa}^{ik} - 1$$

$$s = \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = 3 - l_k \wedge$$

$$l_{k_2} = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_s)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_s - j_{ik})!}$$

$$\frac{(n_s - j_i - n - 1)!}{(n_s - j_i - n - 1 - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_{ik} + l_{ik} - j_{sa}^{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - l_s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_s=1}^{l_s} \sum_{j_{sa}^{ik}=j_{ik}-j_s+1}^{j_{sa}^{ik}-1} \sum_{j_i=n+j_{sa}^{ik}-D-s}^{(n)} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(n_i+2 \cdot j_s+j_{sa}^{ik}-j_{ik}-j_i-l_{k_1}-l_{k_2}-2 \cdot j_{sa}^s)!} \\
& \sum_{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+2 \cdot j_s+j_{sa}^{ik}-j_{ik}-j_i-2 \cdot j_{sa}^s)!} \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}} = \sum_{i=1}^{D-s} \sum_{(j_s=2)}^{(n)} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(n)} \sum_{(n_i=n+\mathbb{k})}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{i=1}^n \sum_{(n_i=n_i+1)}^{(n_i+1)}$$

$$\sum_{n_{ik}+k_2-j_{ik}}^{n_{is}+j_s-j_{ik}-1} \sum_{(j_i=j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}$$

$$\frac{(n_{is} - n_{is} - 1)!}{(n_{is} - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{ik} - n_{ik} - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

GÜLDÜZMAYA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_s \wedge$

$D + s - n < l_i \leq D + l_s - n - 1 \wedge$

$(D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge$

$s = (j_{sa}^s, \mathbb{k}_1, j_{sa}^{i_2}, j_{sa}^i)$

$s = 3 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z: z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \dots \Rightarrow$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbf{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbf{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + \dots - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(n)} \sum_{(j_i=l_s+s)}^{(n)} \\
 & \sum_{n_i=\mathbf{n}+\mathbf{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbf{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=\mathbf{n}+\mathbf{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbf{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
 \end{aligned}$$

GÜLDÜMÜKKA

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j_{sa}^{ik} - l_{sa}}^{(j_{ik} - j_s - j_{sa}^{ik} + 1)} \sum_{j_{sa}^{ik}=1}^{(l_s + j_{sa} - 1)} \sum_{j_{sa}^{ik}=l_i + n + j_{sa} - D - s}^{(j_{sa}^{ik} - 1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$n > n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{\binom{j_s + j_{sa}^{ik} + 1}{j_s}} \sum_{i=1}^{\binom{l_s + j_{sa}^{ik}}{l_s + j_{sa}^{ik} - j_i - l_{ik}}} \sum_{n_i=n+\mathbb{k}}^{\binom{n_i - j_s + 1}{n_i = n + \mathbb{k} - j_s + 1}} \sum_{n_{ik}=n+\mathbb{k}_2 - j_{ik} + 1}^{\binom{n_{is} + j_{ik} - \mathbb{k}_1}{n_{is} = n + \mathbb{k} - j_s + 1}} \sum_{n_s=n - j_i + 1}^{\binom{n_{ik} + j_{ik} - j_i - \mathbb{k}_2}{n_s = n - j_i + 1}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜMÜNYA

$$\begin{aligned}
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-1}^{n_{is}+j_s-j_{ik}} \sum_{(n_s=n-j_i+l_{ik}-k_2)}^{(n_i+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_s - 1)!}{(n_s - n_s - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDENWA

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{(\quad)}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1$$

$$(D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_2 : z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{\binom{(\quad)}{j_s=2}}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{\binom{(\quad)}{j_i=j_{ik}+l_i-l_{ik}}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(\quad)}{n_{is}=n+\mathbb{k}-j_s+1}}^{(n_i-j_s+1)}$$

$$\sum_{n_{is}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{(\quad)}{n_s=n-j_i+1}}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^k + 1)!}{(j_s + l_{ik} - j_{sa}^k - 1)! \cdot (j_{ik} - j_{sa}^k - j_{sa}^k + 1)!} \cdot \\
& \frac{(D - l_{ik})!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(l_s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^k+1)}^{(l_s)} \\
& \sum_{j_{ik}=j_s+j_{sa}^k-1}^{n+j_{sa}^k-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{(l_s)} \sum_{j_s=l_i+n-l_s+1}^{(l_s)} \sum_{j_s+j_{sa}^{ik}-1}^{(l_s)} \sum_{a=j_{ik}+l_{sa}-l_{ik}}^{(l_s)} \sum_{j_s+1}^{(l_s)} \sum_{n_i+l_k}^{(l_s)} \sum_{n_{is}=n+l_k-j_s+1}^{(l_s)} \sum_{n_i+n_{is}+j_{sa}^{ik}-l_{k_1}}^{(l_s)} \sum_{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}^{(l_s)} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_s - j_{sa}^{ik} > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge I = l_k \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$$

$s = 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^S_{j_s j_{ik} j_i} = \sum_{k=1}^{(\quad)} \sum_{(j_s=1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_i+\mathbb{k}}^{(\quad)} \sum_{(j_i=s)}^{(\quad)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i-\mathbb{k}_2}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_s - 1)!}{(j_{ik} - 2)! \cdot (n_s - j_{ik} + 1)!}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_s + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\quad)} \sum_{(j_s=1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\quad)} \sum_{(j_i=s)}^{(\quad)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

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$$D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z^j} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\cdot)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\cdot)} \sum_{(j_i=s)}^{(\cdot)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\cdot)} \sum_{n_s=n_{ik}}^{(\cdot)} \sum_{(j_i=j_i-\mathbb{k}_2)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (2 \cdot j_s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (j_{sa}^s)!}$$

$$\frac{(n_i - l_i)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1 - j_{sa}^{ik}, \mathbb{k}_2, \dots\} \wedge$

$s > 3 \wedge s = s + 1 \wedge$

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
& \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa}^{ik} - l_{ik})! \cdot (l_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + \mathbf{n} - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
& \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(\mathbf{n})} \sum_{(j_i=l_i+\mathbf{n}-D)}^{(\mathbf{n})} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(\quad)} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\mathbf{n} + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f^z(j_{sa}^{ik}, j_i) = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{()} \sum_{j_s=j_{ik}+1}^{()} \sum_{j_{ik}=j_i+j_s}^{()} \sum_{j_i=l_i+n-D}^{()} \sum_{n_i=n+l_k}^{()} \sum_{n_{is}=n+l_k-j_s+1}^{()} \sum_{n_i=n+l_k-l_{k_1}}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}^{()} \frac{(n_i + 2 \cdot j_s + j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\geq n < n \wedge l_s > D - 1 + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{ik} + j_s \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_s \leq j_i \leq n \wedge$$

$$l_s - j_{sa}^{ik} - 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz \mathcal{S}_{j_s, j_{ik}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+1}^n \sum_{(n_i=j_s+1)}^{(n)}$$

$$\sum_{i_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{ik}+j_{ik}-j_{sa}^{ik})}^{(n)}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} + j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - j_i - n - l_s - 1)!}{(n_s - j_i - n - l_s - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_s - l_{ik} - s)!}{(j_{ik} + l_{k_1} - j_i - l_{k_2})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{\binom{()}{j_i=j_{ik}+s-j_{sa}^{ik}}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$\sum_{i \in S} \sum_{j_i} = \sum_{k=1}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-s-1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^n \sum_{j_s=j_{ik}-j_{sa}^{ik}}^{(n)} \\
 & \sum_{n_i=n+k}^{n} \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{s-j_{ik}-k_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜNYA

$$\sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\cdot)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n_{ik}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_{ik}+j_{ik}-j_i=l_{k_2})}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot 2 \cdot j_s \cdot (j_{sa}^{ik} - j_{ik} - l_{k_2} - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + l_i \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq l_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq l_i \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_i + j_s - s > l_i \wedge$$

$$(D \geq n < n \wedge l_s > D - n + l_i) \wedge$$

$$j_{sa}^{ik} = j_{sa}^i \wedge j_{sa}^s > j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^i, l_{k_1}, j_{sa}^i - 2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = l_i + l_k \wedge$$

$$l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=l_i+n-D)}^{(n)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_1)} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (j_s-n_{is}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_s-n_{ik}+j_{ik}-n_s-j_i)!}{(j_i-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \frac{(n-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - l_i - s)! \cdot (j_i + j_{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)} \cdot \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n-s+1)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n-s+1)} \cdot \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \cdot \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n-s+1)} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(n-s+1)} \cdot \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$\begin{aligned} & \sum_{i=1}^{(l_i+n-D)} \sum_{j_s=n-D}^{(l_i+n-D)} \\ & \sum_{i_{ik}=j_s+j_{sa}-1}^{(n)} \sum_{(j_i=l_i+n-D)}^{(n)} \\ & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\ & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\ & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\ & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

$$\sum_{l_1=n+l_k}^n \sum_{(n_{is}=n-l_1+1)}^{(n_{is}+1)}$$

$$\frac{(n_{is}+j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-l_1)!}{(n_{ik}+l_2-j_{ik}-1)! \cdot (n_{is}-j_i+1)!} \cdot \frac{(n_{is}-l_1-1)! \cdot (n_{is}-j_s+1)!}{(n_{is}-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-l_1-l_1-1)!}{(j_{ik}-l_1-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_1)!}$$

$$\frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_s \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = \mathbb{k}_1 + \mathbb{k} \wedge$$

$$\mathbb{k}_z: \mathbb{k}_z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\frac{\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot$$

$$\frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!}$$

$$\frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(j_s-2)!}$$

$$\frac{(l_{ik}-l_s+j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{sa}^{ik}-l_s)! \cdot (j_s-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(n)} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i+2 \cdot j_s+j_{sa}^{ik}-j_{ik}-j_i-l_{k_1}-l_{k_2}-2 \cdot j_{sa}^s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+2 \cdot j_s+j_{sa}^{ik}-j_{ik}-j_i-2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z = j_{ik}, j_i = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + n - D)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{sa}^{ik} - s}^{k - s} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{()}$$

$$j_{ik} = l_i + n + j_{sa}^{ik} - D - s$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{()} \sum_{j_s=j_{ik}+j_{sa}^{ik}+1}^{()} \sum_{j_{sa}^{ik}=D-j_{ik}+j_{sa}^{ik}}^{n+j_{sa}^{ik}-j_{ik}+j_{sa}^{ik}} \sum_{j_{ik}=j_{sa}^{ik}+1}^{n+l_{ik}-j_{sa}^{ik}+1} \sum_{n_i=l_{ik}-k}^{n} \sum_{n_{is}=n+k-j_s+1}^{()} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n_{is} - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - 1 + 1 \wedge$

$2 \leq j_s < j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$j_{sa}^{ik} - 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$(D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-j_{sa}^{ik})}^{(n-j_{sa}^{ik})}$$

$$\frac{(n_{is} + \mathbb{k} - j_{sa}^{ik})!}{(n_{is} + \mathbb{k} - j_{sa}^{ik} - 1)!} \cdot \frac{(n_{is} - j_{sa}^{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n-j_{sa}^{ik})}$$

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$$\frac{\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - j_i - n - l_{k_2} - 1)!}{(n_s - j_i - n - l_{k_2} - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} + l_{k_2} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^n \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(\)} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{ik}, j_i = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = j_i + j_{sa}^{ik} - s} \sum_{(j_i = l_{ik} + n + s - D - j_{sa}^{ik})}^{(n)}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{\infty} (j_s = j_{ik} - j_{sa}^{ik})$$

(n)

$$\sum_{j_{ik}=j_i+j_s}^{\infty} (j_i = l_{ik} + n + s - D - j_{sa}^{ik})$$

$$\sum_{n_i=n+l_k}^{\infty} \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{\infty} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(\)}$$

$$\frac{(n_i + j_s + 1 - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-k)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-k}^{n+j_{sa}^{ik}-s} \sum_{(j_{ik}-j_{sa}^{ik})}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{(n+l_s)}^{(n+l_s)} \sum_{(n+l_s-j_s+1)}^{(n+l_s-j_s+1)}$$

$$\sum_{(n_{is}=j_{ik}-k_1)}^{(n_{is}=j_{ik}-k_1)} \sum_{(j_i-k_2)}^{(j_i-k_2)}$$

$$\sum_{(n+l_s-j_s+1)}^{(n+l_s-j_s+1)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

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$$\sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_i)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{()} \sum_{(n_s=n_{ik}+j_i-j_{i_2})}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^i)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_s - j_{ik} - j_i - j_{sa}^i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_i \wedge j_{ik} \leq j_i + j_{sa}^{ik} - s$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$

$(D \geq n < n \wedge l_s > 0 \wedge$

$j_{sa}^i = j_{sa}^i - 1 \wedge j_{sa}^i > j_{sa}^i - 1 \wedge$

$s: \{ \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}^i \} \wedge$

$> 3 \wedge s > s + l_k \wedge$

$l_{k_z}: z = 2 \wedge l_{k_z} = l_{k_2} \Rightarrow$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik})!} \cdot \\
& \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{sa}^{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^n \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(n-s+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\quad)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{\lfloor \frac{l_{ik} + n - D - j_{sa}^{ik} + 1}{2} \rfloor} \sum_{\substack{(\cdot) \\ j_{ik} = j_s + j_{sa}^{ik} - 1}} \sum_{\substack{(\cdot) \\ (j_i = j_{ik} + s - j_{sa}^{ik})}} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{(\cdot)} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$fz S_{j_s, j_i, j_i} = \sum_{k=1}^{(j_i - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s - D)}^{(n)}$$

$$\sum_{j_{ik} = l_{ik} + 1}^{(n)}$$

$$\sum_{n_i = n + k}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + k - j_s + 1)}$$

$$\sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(l_i+n-D)}$$

$$\sum_{n+l_k}^{n+l_k} \sum_{(n_i+n+1)}$$

$$\sum_{(n_{ik}=n_{is}+j_{ik}-l_{k_1})} \sum_{(j_i-l_{k_2})}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > n - n + 1 \wedge$$

$$2 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i - j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n - l = l_k) \wedge$$

$$j_{sa}^{ik} > j_{sa}^{ik} - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > s \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(n)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1) \cdot (j_s-n_{is}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_s-n_s)}{(j_i-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \frac{(n-1)!}{(n_s) \cdot (j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_{ik}-l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{(\cdot)}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_s)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \dots + \mathbb{k}_2) \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)} \sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(n)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s) \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s) \cdot (j_{ik} - j_s - j_s + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_{ik} - l_i) \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - l_i) \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
\end{aligned}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{(n-s)} \sum_{j_s=l_i+n-D-s+k}^{(n-s-k)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-1}^{(j_i+j_{sa}^{ik}-1)}$$

$$\sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}^{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)} \sum_{(n_s=n_{ik}+j_{ik}-j_i-k_2)}^{(n_s=n_{ik}+j_{ik}-j_i-k_2)}$$

$$\frac{(n_i + j_{ik} + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \frac{\sum_{j_i=j_{ik}-D}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=n-D)}^{(n)} \sum_{n_i=n+k}^{(n_i-j_s)} \sum_{n_i=n+k_2-j_s+1}^{(n_i-j_s)} \sum_{n_i=n+k_2-j_s+1}^{(n_i-j_s)} \sum_{(n_s=n-j_i+1)}^{(n_i-j_s)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{ik} - k_1 - 1)!}{(j_{ik} + j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

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$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_s+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_i-j_{\mathbb{k}_2})}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \dots - 2 \cdot j_s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \dots - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - 1)! \cdot (j_s - 2)!} \cdot \frac{(D - \dots)}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik} - j_{sa}^{ik} < j_{ik} \leq j_s + j_{sa}^{ik} - s$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - \dots = l_{ik} \wedge$

$(D \geq \dots < n \wedge l_s > 0 \wedge$

$j_s = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^i - 1 \wedge$

$s: \{ \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \dots, i \} \wedge$

$> 3 \wedge \dots = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_1 = \mathbb{k}_2 = \dots = 2 \Rightarrow$

$$f_z^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\frac{\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik})!} \cdot \frac{(n - j_i - 1)!}{(n_s - j_i - n - j_i - 1)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{ik} - l_{ik} - s)!}{(j_{ik} + l_{k_2} - j_i - l_{k_2})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{\sum} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(\)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{k=1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(n)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot$$

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{n_s} \sum_{j_s=j_{ik}+l_s-k}^{n_s} \sum_{j_{ik}=l_i+l_s-k-s}^{n_s} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(n)} \\
& \sum_{n_i=n+l_k}^{n_i-j_{ik}-k_1} \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_s-j_{ik}-k_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_i^l)}^{(\cdot)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_k} \sum_{(n_{ik}+j_{ik}-j_i)}^{(\cdot)} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - 2 \cdot j_{sa}^s)!} \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > D - n \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - s \wedge$

$j_{ik} + j_{sa}^{ik} \leq j_i \leq$

$l_{ik} - j_{sa}^{ik} + 1 = l_i + j_{sa}^{ik} - s > l_i \wedge$

$(D \geq n < n \wedge I = l_{k_1} = 0 \wedge$

$j_{sa}^{ik} = j_{sa}^{il} + 1 \wedge j_{sa}^s > j_{sa}^{il} - 1 \wedge$

$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik} - j_{sa}^s\} \wedge$

$s > 3 \wedge s = s + l_k \wedge$

$z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$

$$f_z^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-s-1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(n)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_1)} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)!(n_i-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_i-n_{ik}-k_1-1)!}{(j_i-n_{ik}-1)!(n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(n)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - l_i - s)! \cdot (j_i + j_{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{n + j_{sa}^{ik} - s} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{()} \cdot \\
& \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{n + j_{sa}^{ik} - s} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{()} \cdot \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \cdot \\
& \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{()} \cdot \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$f_z S_{j_s}^{(l_i+n-D-s)} \sum_{k=1}^{j_{sa}^{ik}+1} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} (j_i=l_i+n-D) \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

$$\sum_{i=n+l_k}^n \sum_{(n_{is}=n_{is}+1)}^{(n_{is}+1)}$$

$$\frac{(n_{is}+j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-1)!}{(n_{is}-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-1-k_1-1)!}{(j_{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!}$$

$$\frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{iS}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{iS}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = \mathbb{k}_1 + \mathbb{k} \wedge$$

$$\mathbb{k}_z: \mathbb{k}_z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{iS}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
& \frac{\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(j_s - 2)!}{(j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)} \\
& \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \frac{\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}
\end{aligned}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{(n-s+1)} \sum_{l=D-s+1}^{(n-s+1)}$$

$$\sum_{j_s+l_{ik}-s}^{(n-s+1)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n-s+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-k_2)}^{(n-s+1)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$n > n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{(j_{ik}+l_{ik}-l_i)}^{(j_{ik}+l_{ik}-l_i)} \sum_{(j_i=l_i+1)}^{(j_i=l_i+1)}$$

$$\sum_{n_i=n+l_s}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\sum_{(n_{ik}=n-j_i+1)}^{(n_{ik}=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

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$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+l_{k_2}-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - 2 \cdot j_s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - 2 \cdot j_s)!} \cdot \frac{(l_s - 2)!}{(l_s - 2)! \cdot (j_s - 2)!} \cdot \frac{(D + j_s - n - l_i)! \cdot (n - j_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 < j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - 1 = l_{ik} \wedge$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_s = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^i - 1 \wedge$$

$$s: \{ \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_i \} \wedge$$

$$s > 3 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_1} = l_{k_2} + 2) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} + l_{k_1} - j_{sa}^{ik} - j_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{\binom{()}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{()}{}} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{\binom{()}{}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{\binom{()}{}} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z,s}^{j_{ik}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \binom{(\quad)}{\sum_{(j_i=j_{ik}+l_i-l_{ik})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{j_s=l_i+n-D-s}^{(n-s)} \sum_{j_{ik}=j_s-1}^{(j_{ik}-j_s-1)} \sum_{j_{sa}^{ik}=j_{ik}-j_s-1}^{(j_{sa}^{ik}-j_{ik}+1)} \sum_{n_i=n+l_k}^{(n_i-j_s+1)} \sum_{n_{is}=n+l_k-j_s+1}^{(n_{is}-j_{ik}-l_{k_1})} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \sum_{n_s=n-j_i+1}^{(n_s-n-j_i+1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_i=j_{ik}+l_i-l_s)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n_{ik}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-1}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik})! \cdot (n_{ik} - k_2 + 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - 1)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - 1)! \cdot (2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n_{ik} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > 0 \wedge l_i + j_{ik} - s = l_s \wedge$$

$$(D - n < n \wedge I = k_1 + k_2 = 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^s > j_s^s - 1 \wedge$$

$$s: \{j_s^s, \dots, k_1, j_{sa}^{ik}, j_{sa}^s\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k; z = 2, k = k_1 + k_2 \Rightarrow$$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{\binom{n}{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}} \sum_{n_i=n+l_k}^n \sum_{\binom{n_i-j_s+1}{n_{is}=n+l_k-j_s+1}} \sum_{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{\binom{n_{ik}+j_{ik}-j_i-l_{k_1}}{n_{is}=n+l_{k_2}-j_{ik}+1} \binom{n_s-j_i+1}} \frac{\binom{n_i-1}{j_s-2} \binom{n_i-n_{is}+1}{n_i-n_{is}+1}}{\binom{n_i-n_{ik}-l_{k_1}-1}{j_{ik}-j_s-1} \binom{n_i-n_{ik}-l_{k_1}-1}{n_i-n_{ik}-l_{k_1}-1}} \frac{\binom{n_i-1}{j_i-n_s}}{\binom{j_i-1}{j_i-1} \binom{n_{ik}+j_{ik}-n_s-j_i}{n_{ik}+j_{ik}-n_s-j_i}} \frac{\binom{n_i-1}{j_i-n-1} \cdot \binom{n-j_i}{n-j_i}}{\binom{l_s-2}{l_s-j_s} \cdot \binom{j_s-2}{j_s-2}} \frac{\binom{l_{ik}-l_s-j_{sa}^{ik}+1}{j_{ik}-l_{ik}-j_{ik}-l_s} \cdot \binom{j_{ik}-j_s-j_{sa}^{ik}+1}{j_{ik}-j_s-j_{sa}^{ik}+1}}{(D-l_i)!} \frac{1}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=1} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{\binom{n}{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{n_i-j_s+1}{n_{is}=n+l_k-j_s+1}}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2)$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = l_{ik} + n - D}^{n + j_{sa}^{ik} - s} \sum_{(j_i = j_{ik} + l_i - l_{ik})}^{()}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{()}$$

$$\sum_{n_{ik} = l_{ik} + n - D}^{n - l_{ik} - s} \sum_{(j_i = j_{ik} + l_i - l_{ik})}^{()}$$

$$\sum_{n_i = n + l_k}^n \sum_{(n_{is} = n + l_k - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - l_{k_1}} \sum_{(n_s = n_{ik} + j_{ik} - j_i - l_{k_2})}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$n \leq l_s \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{(j_s = l_s, n-D)}^{(l_s = n-D-j_{sa}^{ik})} \sum_{(j_{ik} = l_{ik} + n - j_{sa}^{ik} - s)}^{(l_{ik} = n - j_{sa}^{ik})} \sum_{(j_i = l_i + n - j_{sa}^{ik} - s)}^{(l_i = n - j_{sa}^{ik})} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_{is} = n + \mathbb{k} - j_s + 1)} \sum_{(n_{ik} = \mathbb{k}_2 - j_{ik} + 1)}^{(n_{ik} = \mathbb{k}_2 - j_{ik} + 1)} \sum_{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\begin{aligned}
 & \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(n-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}-1}^{n_{ik}+j_s-j_{ik}-1} \sum_{(n_s=n-j_i+1)}^{(n_i-j_s+1)} \\
 & \frac{(n_s-n_{ik}-1)!}{(j_s-2)! \cdot (n_{ik}+j_s-j_{ik}-1)!} \\
 & \frac{(n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_s-n-1)!}{(n_{ik}+j_{ik}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(n-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{()} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_2 \cdot z = 2 \wedge (\mathbb{k}_2 = \mathbb{k}_1 + 1) \Rightarrow$$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \sum_{j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-j_{sa}^{ik})} \sum_{j_{ik}=j_{sa}^{ik}+1} \sum_{(j_i=s+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - l_i - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i - s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{l_{ik}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\cdot)} \\
& \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik}} \sum_{(j_i = l_{ik} + s - j_{sa}^{ik} + 1)}^{(l_i)} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{j_s=j_{ik}^{ik}+1}^{()} (j_s=j_{ik}^{ik}+1)$$

$$\sum_{j_{ik}=j_i+j_s}^{()} \sum_{(j_i=s+1)}^{()} (j_i=s+1)$$

$$\sum_{n_i=1}^n \sum_{k=1}^{()} (n_{is}=n+k-j_s+1)$$

$$\sum_{n_{is}=j_{ik}-k_1}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-k_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n_{is} - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_i < j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_s \leq j_i \leq n \wedge$$

$$j_{ik} - 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\frac{(j_i + j_{sa}^{ik} - l_s + s - 1)!}{(j_{ik} - j_{sa}^{ik} + 1)! \cdot (l_s + s - 1)!}$$

$$\frac{(n_i - j_s)!}{(n + k - j_s + 1)! \cdot (n + k - j_s + 1)!}$$

$$\frac{(n_{is} - j_{ik} - k_1)! \cdot (j_i - k_2)!}{(n + k_2 - j_{ik} - 1)! \cdot (n_s - j_i + 1)!}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=l_s+s)}^{(l_i)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_1})}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_i-l_{k_2}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-j_i-n-1)! \cdot (n-j_i)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=1}^{\binom{()}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{()}{}} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{\binom{()}{}} \sum_{(j_i=s+1)}^{(l_s+s-1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{\binom{()}{}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{\binom{()}{}}
 \end{aligned}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) =$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik} - j_{sa}^{ik} - s)! \cdot (j_i + j_{sa}^{ik} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!} \cdot$$

$$\sum_{j_s=1}^{j_{ik} - j_{sa}^{ik} + 1} \sum_{j_i=1}^{j_{ik} - j_{sa}^{ik} + 1}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{(j_s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(j_i)} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{\binom{D-l_i}{j_i-n-l_i}} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{\binom{D-l_i}{j_i-n-l_i}} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{j_i=j_{ik}-j_{sa}^{ik}}^{\binom{D-l_i}{j_i-n-l_i}} \frac{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 0 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} - s - j_{sa}^{ik} \leq j_i - s \wedge$$

$$l_s - j_{sa}^{ik} - 1 = l_s \wedge l_i - j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - 1 \wedge$$

$$(D \geq n - 1 \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$\begin{aligned}
 f_{z^S} S_{j_s, j_{ik}, j_i} &= \sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(l_{ik} - j_{sa}^{ik} + 1)} \\
 &\sum_{j_{ik}=j_s + j_{sa}^{ik} - 1}^{(l_i)} \sum_{(j_i=j_{ik} + s - j_{sa}^{ik})}^{(l_i)} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n+k_2-j_{sa}^{ik}-1}^{n_{is}+j_s-j_{ik}-1} \sum_{(n_s=n-j_i+1)}^{n_{is}+j_s-j_{ik}-1} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 &\frac{(n_{is} - n_s - 1)!}{(n_{is} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 &\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$\sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(l_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j_s + j_{sa}^{ik} - 1}^{(\quad)} \sum_{(j_i=j_{ik} + s - j_{sa}^{ik})}^{(\quad)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{(\cdot)}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_1 \cdot z = 2 \wedge (\mathbb{k}_1 = \mathbb{k}_1 + 1) \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_i)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - 1)! \cdot (j_i + j_{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{(l_s)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$f_{zS}^{j_s, j_{sa}^{ik}, j_i} = \sum_{k=1}^{\binom{()}{j_s}} (j_s = j_{ik} - j_{sa}^{ik} + 1)$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_s-s} \sum_{(j_i=l_i+n-D)}^{(l_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} - j_{sa}^{ik} + 1}^{l_{ik}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$(n_i - j_s + 1)$$

$$\sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{l_{ik}} \sum_{(n_{ik} + j_s - l_{ik} - j_s + 1)}$$

$$n_{is} + j_s - l_{ik} - l_{k_1} \quad (n_{ik} + j_s - l_{k_2})$$

$$\sum_{(n_{ik} + j_s - l_{k_2} - j_{ik} - l_{k_1} + 1)}^{n_{is} + j_s - l_{ik} - l_{k_1}} \sum_{(n_s = n - j_i + 1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

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$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(l_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_i)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_i-l_{k_2})}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_i \wedge j_{sa}^{ik} - s$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - j_{ik} = l_{k_1} \wedge$$

$$D + n < l_i \leq D - l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$(n \geq n < n \wedge l_s = l_k > 0$$

$$j_{sa}^{ik} - j_{sa}^i - 1 \wedge j_{sa}^s - j_{sa}^{ik} - 1$$

$$\{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s$$

$$l_{k_2} \cdot z = z \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(l_s+s-1)}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik})!} \cdot \\
 & \frac{(n_s - j_i - n - l_s - 1)!}{(n_s - j_i - n - l_s - 1 - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{ik} - l_{ik} - s)!}{(j_{ik} + l_{k_2} - j_{ik} - l_{k_2})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{\binom{()}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{()}{}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=l_s+s)}^{\binom{(n)}{}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - j_i - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - s)!}$$

$$\frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_s=1}^{l_s} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_s+l_s-1}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{l_s+s-1} \sum_{j_i=l_i+n-D}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^n \sum_{j_i=l_i+n-D}^{(n)} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(n)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
 & \sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_{i_s}+1)} \\
 & \sum_{n_{ik}+l_{k_2}-j_{ik}}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(j_i=j_{ik}+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_{is}-n_{i_s}-1)!}{(n_{i_s}-2)! \cdot (n_{i_s}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{i_s}-l_{k_1}-1)!}{(j_{ik}-j_{i_s}-1)! \cdot (n_{i_s}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(n)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}
 \end{aligned}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_i \wedge$

$D + s - n < l_i \leq D + l_i - s - n - j_{sa}^{ik}$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge$

$s = (j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^s) \wedge$

$s > 3 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z: z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
& \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(j_s - 2)!}{(j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + l_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
& \sum_{j_{ik}=\mathbf{l}_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{\mathbf{l}_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\mathbf{n})} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
\end{aligned}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{()}$$

$$\sum_{j_{ik} = l_i}^{l_s + j_{sa}^{ik}} \sum_{j_i = j_{ik} + s - j_{sa}^{ik}}^{()}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - k_2)}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - l_i - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$l_i \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} \sum_{k=1}^{(n-D-s)} \sum_{j_{ik}=j_s}^{(n)} \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{is}=n+\mathbb{k}_2-j_{ik}+1}^{(n_{is}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+k_2-j_{ik}-1}^{(n_i+j_s-j_{ik}-n_{is}+j_{ik}-k_2)} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} - j_s + 1)!}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_i - n_s - 1)!}{(n_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{(\cdot)}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_s \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + 1 \wedge$$

$$\mathbb{k}: z = 2 \wedge \dots = \mathbb{k}_1 + \dots \Rightarrow$$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - l_i - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i - s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{(l_s)} \sum_{j_s=l_i+n-l_{ik}-s+1}^{j_s} \sum_{j_{ik}=j_s+j_{sa}^{ik}}^{j_{ik}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{j_i} \sum_{l_{ik}=n+l_{ik}-j_s+1}^{l_{ik}} \sum_{l_{ik_1}=n+l_{ik}-j_s+1}^{l_{ik_1}} \sum_{l_{ik_2}=n+l_{ik}-j_s+1}^{l_{ik_2}} \frac{(n_i + 2 \cdot j_s + l_{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$n \geq n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_{ik} \leq j_{ik} - j_{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge l = l_{ik} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$$

$s > 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(l_s - j_{sa}^{ik} + 1)} \sum_{j_{ik}=j_i + j_{sa}^{ik}}^{(l_s + s - j_{sa}^{ik} + 1)} \sum_{(j_i=s+1)}^{(n_i - j_{sa}^{ik} + 1)} \frac{(n_{ik} + \mathbb{k} - j_{sa}^{ik} + 1)!}{(j_s - 2)! \cdot (n_{ik} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \sum_{j_{ik}=j_i + j_{sa}^{ik} - s}^{(l_i)} \sum_{(j_i=l_s + s)}$$

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$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik})!}$$

$$\frac{(n_s - j_i - n - l_{k_2} - 1)!}{(n_s - j_i - n - l_{k_2} - 1 - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{sa}^{ik} + 1 - j_{sa}^{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-1)} \sum_{(j_i=s+1)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(n_i-j_s+1)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz \mathcal{D}_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\begin{aligned}
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(n - l_i)!}{(D + j_{ik} - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{j_s=2}^{(l_s)} \sum_{j_{ik}=l_s+j_{sa}^{ik}}^{(n)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(n)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_i = \dots + s - j_{sa}^{ik})}^{()}$$

$$\sum_{n + \mathbb{k}}^{(n_i + 1)} \sum_{(n_{is} = n + \mathbb{k} - 1)}$$

$$\sum_{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > \dots \wedge l_s \leq D - n + \dots \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge \dots + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} - s - j_{sa}^{ik} \leq j_i - \dots \wedge$$

$$l_{ik} - j_{sa}^{ik} - 1 > l_s \wedge l_i - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n - \dots \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+k_2-1}^{n_{is}+j_s-j_{ik}} \sum_{(n_{ik}+j_{ik}-n_{i-k_2})}^{(n_{ik}+j_{ik}-n_{i-k_2})}$$

$$\frac{(n_i - n_{i-k_2} - 1)!}{(j_s - 2)! \cdot (n_{i-k_2} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{i-k_2} - n_s - 1)!}{(n_{i-k_2} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + 1 \wedge$$

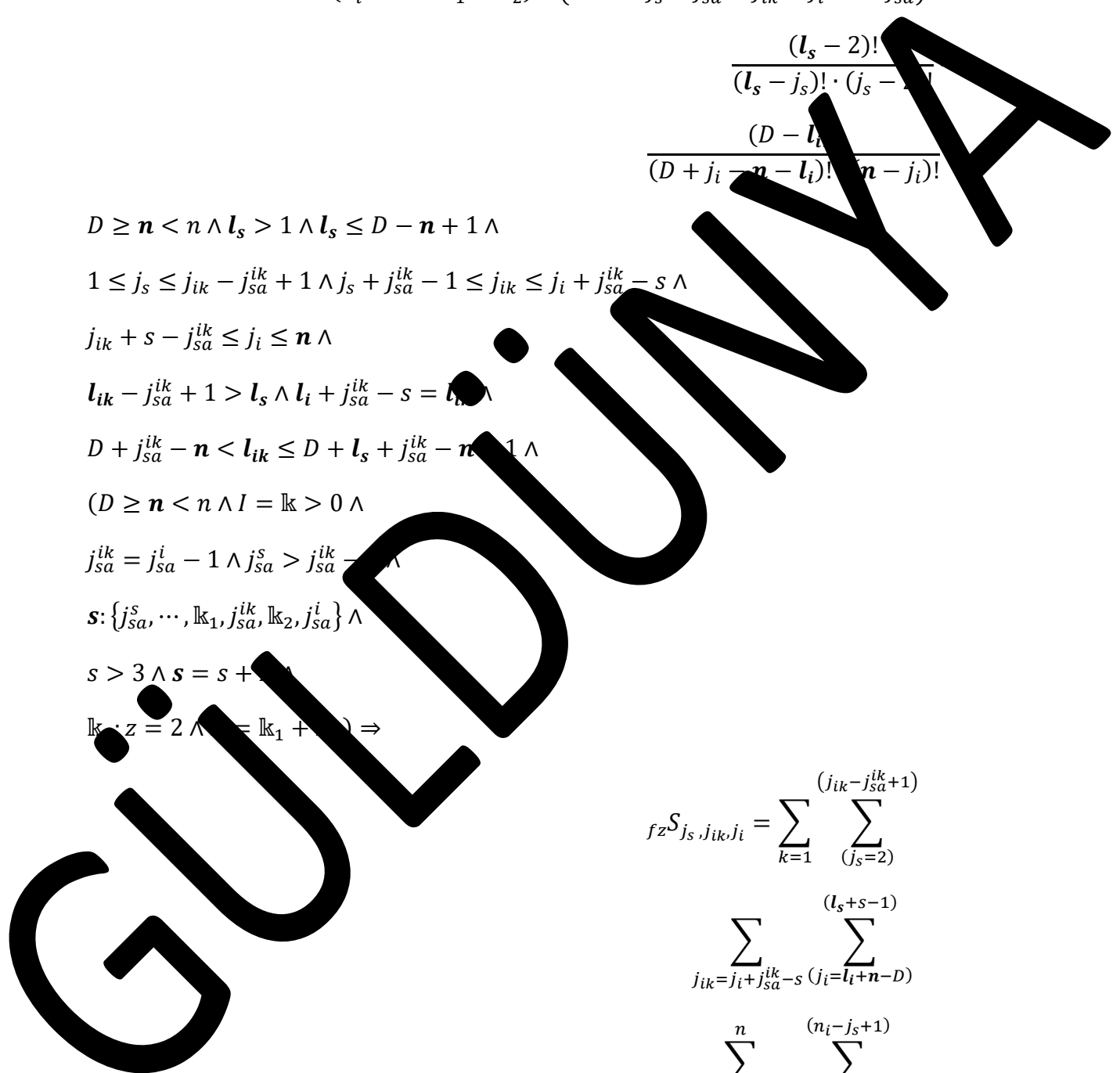
$$\mathbb{k}: z = 2 \wedge (\mathbb{k} = \mathbb{k}_1 + \dots) \Rightarrow$$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-1)} \sum_{(j_i=l_i+n-D)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$



$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(l_s - j_s - 1)! \cdot (l_s - j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_s - j_{sa} + 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_s+s)}^{(n)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{j_s=j_{ik} - j_{sa}^{ik} + 1}^{()}$$

$$\sum_{j_{ik}=j_i + j_s}^{()} \sum_{(j_i=l_i + n - D)}$$

$$\sum_{n_{is} + k}^{()} \sum_{(n_{is}=n+k-j_s+1)}$$

$$\sum_{=n_{is} + j_s - k - k_1}^{()} \sum_{(n_s=n_{ik} + j_{ik} - j_i - k_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - j_s - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{()}$$

$$\sum_{n_i = \mathbb{k} (n_{is} = n + \mathbb{k} - j_s)}^{(n_i - 1)}$$

$$\sum_{n_{ik} = n - j_{ik} + 1}^{(n_s - j_{ik} - \mathbb{k}_1 + j_{ik} - j_i - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(n_s - j_s - 1)! \cdot (n_s + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik} = l_s + j_{sa}^{ik}}^{n + j_{sa}^{ik} - s} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{()}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - 1 - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{\binom{()}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{()}{}} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{\binom{()}{}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{\binom{()}{}} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}
 \end{aligned}$$

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$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_i + n - D - s)} \sum_{(j_s=2)}^{(j_s-2)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_s - 1)!}{(D + j_i - n - l_i)! \cdot (j_i - l_i)!} + \\
 & \sum_{k=0}^{(l_s)} \sum_{l_k=0}^{(D-s+1)} \sum_{n_i=j_s+j_{sa}^{ik}-1}^{n_{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k1})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j_i=l_i-k+s-j_{sa}^{ik})}^{(n_i-k+1)} \sum_{(n_i=n-k)}^{(n_i-k+1)} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < 0 \leq D + j_i + s - n - 1 \wedge$$

$$(D - n - n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{i-1}, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$\begin{aligned}
 f_{z^S} S_{j_s, j_{ik}, j_i} &= \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)} \\
 &\sum_{j_{ik}=j_i + j_{sa}^{ik} - s}^{(l_s + s - 1)} \sum_{(j_i=l_{ik} + n + s - D - j_{ik})}^{(l_s + s - 1)} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_i+j_s-j_{ik}-n_{is}+j_{ik}-k_2)} \sum_{(n_s=n-j_i+1)}^{(n_i-j_s+1)} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} - j_s + 1)!} \\
 &\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 &\frac{(n_i - n_s - 1)!}{(n_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 &\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
 &\sum_{j_{ik}=j_i + j_{sa}^{ik} - s}^{(n)} \sum_{(j_i=l_s + s)}^{(n)} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\frac{\sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-1)} \sum_{(j_i=l_{ik}+\mathbf{n}+s-D-j_{sa}^{ik})}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\mathbf{n} + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz^S j_{ik} j_i = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})} ()$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot$$

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{(l_s)} \binom{l_s}{j_s} \cdot \\
& \sum_{j_{sa}^{ik}=n+l_s-j_{ik}-s}^{(n+l_s-j_{ik}-s)} \binom{n+l_s-j_{ik}-s}{j_{sa}^{ik}} \cdot \\
& \sum_{j_{ik}=l_s+j_{sa}^{ik}}^{(n+l_s-j_{ik}-s)} \binom{n+l_s-j_{ik}-s}{j_{ik}} \cdot (j_i = j_{ik} + s - j_{sa}^{ik}) \cdot \\
& \sum_{n_i=n+l_k}^{(n_i-j_s+1)} \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \cdot \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n-s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\sum_{k=1}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_{ik}=n_{ik}+j_{ik}-j_i)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot 2 \cdot j_s \cdot j_{sa}^{ik} - j_{ik} \cdot 2 \cdot j_{sa}^s!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq n - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n - l_i \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > 0 \wedge l_i + j_s - s = l_i \wedge$$

$$D + n - n < l_i \leq D - l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge I = l_k > 1) \wedge$$

$$j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$$

$$2 \wedge l_i = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=2)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \binom{(\quad)}{\quad} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=j_{ik}+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_s-1)!}{(j_i-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_{ik}-l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^s \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \binom{(\quad)}{\quad} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\frac{\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot$$

$$\frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!}$$

$$\frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(j_s-2)!}$$

$$\frac{(l_{ik}-l_s+j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{sa}-l_s)! \cdot (j_s-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_{ik}=j_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i+2 \cdot j_s+j_{sa}^{ik}-j_{ik}-j_i-l_{k_1}-l_{k_2}-2 \cdot j_{sa}^s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+2 \cdot j_s+j_{sa}^{ik}-j_{ik}-j_i-2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$(D \geq n < n \wedge l_s = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{k_2}, j_{sa}^i\}$$

$$s > 1 \wedge s = s + k \wedge$$

$$k_z: z = 2, \dots, k = k_1 + k \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i + j_{sa}^{ik} - s} \sum_{(j_i=s+1)}^{(l_s + s - 1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i - j_s + 1)}$$

$$\frac{\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(j_s - 2)!}$$

$$\frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} - j_i - l_{ik} - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=l_s+s)}^{(l_i)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\frac{\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!}$$

$$\frac{(l_s + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_{ik} - l_i - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_i + j_{sa}^{ik} - s}^{(l_s + s - 1)} \sum_{(j_i = s + 1)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{(\)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1) \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + 1 \wedge$$

$$\mathbb{k}: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \dots \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_i)}^{(l_i)} (j_i = j_{ik} + s - j_{sa}^{ik})$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)!} \cdot (n - j_i)! \cdot \\
 & \frac{(l_s - 1)!}{(l_s - j_s - 1)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - l_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{l_s - j_s - 1} \binom{()}{j_{sa}^{ik+1}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s - j_s - 1} \binom{()}{(j_i = j_{ik} + s - j_{sa}^{ik})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \binom{()}{(n_s=n_{ik}+j_{ik}-j_i-k_2)}$$

$$\frac{(n_i - n - k_1 - k_2 - 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(l_s < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2)$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 1)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{sa}^{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_i)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k2})}^{(j_i)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k1} - l_{k2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k1} - l_{k2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$f_{j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - l_{ik} - s)!}$$

$$\frac{(D - j_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!} +$$

$$\sum_{j_s=2}^{(l_s)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}} \sum_{j_i=l_s+s}^{(n)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

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$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1, \dots, +s-1)}$$

$$\sum_{(j_i = j_i + j_{sa}^{ik}, \dots, l_i - D)}$$

$$\sum_{(n_i - j_s + 1, \dots, +k_1 (n_i - j_s + 1 + k_1 - j_s + 1))}$$

$$\sum_{(n_{ik} = n_{is} - j_{ik} - k_1, \dots, n_{ik} + j_{ik} - j_i - k_2)}$$

$$\frac{(n_j + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2)! \cdot (n_j + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_j > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n > l_i \leq D + l_s + s - n - 1) \vee$$

$$(n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$fz S_{j_s, j_i} = \sum_{k=1}^{(j_s - j_{sa}^{ik} + 1)} \frac{(j_s - j_{sa}^{ik} + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{(j_{ik}=k+s-j_{sa}^{ik})}^{(n)}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}$$

$$\frac{(n_{is}+j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-l_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{ik}-1)!} \cdot \frac{(n_{is}-l_{ik}-1)!}{(n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-l_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{ik}-1)!}$$

$$\frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_i)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()} \sum_{(n_s=n_{ik}+j_i-j_{ik}-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^i)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - j_{sa}^i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1) \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$\begin{aligned}
 f_{z^S}^{j_s, j_{ik}, j_i} &= \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{(n)} \\
 &\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}} \sum_{(j_i=l_i+n-D)}^{(n)} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=k-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n+k_2}^{n_i+j_s-j_{ik}} \sum_{(n_{is}=n-k_2)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 &\frac{(n_i - n_s - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 &\frac{(n_{ik} - n_s - 1)!}{(n_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 &\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 &\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)} \\
 &\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_{ik} + l_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} - l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^s \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()}
 \end{aligned}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) =$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(l_i)} \sum_{(j_i=s)}^{(l_i)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(l_i + j_{sa}^{ik} - j_i - l_{ik})! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)} \sum_{i=1}^{(\cdot)} \sum_{i=s}^{(\cdot)} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=j_{ik}-l_k+1)}^{(\cdot)} \sum_{n_s=1}^{(\cdot)} \sum_{(j_{ik}-j_i-l_{k_2})}^{(\cdot)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_i - l_{ik} - l_{k_2} - l_{k_1})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D - s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_s = -n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_s + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + l_s \wedge l_i - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n$$

$$(D \geq l_i < n \wedge l = l_k > 1) \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - j_{sa}^s > j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^i, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = j_s + l_k \wedge$$

$$l_{k_2} = l_k - 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=s)}^{(l_i)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i+l_k}^{n_{ik}+j_{ik}-j_i-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - j_i - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - l_{k_2} - 1)! \cdot (n - j_i - l_{k_2})!} \cdot$$

$$\frac{(l_i - j_{ik})!}{(j_{ik} - j_{ik})! \cdot (n - j_{sa}^{ik})!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_i=s)}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$\sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)} f_z^{S j_s j_{ik} j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n-k_2-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-k_2}$$

$$\frac{(n_i - j_{ik} - k_1 - 1)!}{(j_{ik} - j_{sa}^{ik} - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\cdot)} \sum_{(j_i=s)}^{(\cdot)}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2} (n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)! / ((n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)! \cdot (D - l_i)! / ((D + s - n - l_i)! \cdot (n - \dots)!))$$

$$((D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s = 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i + s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$(D \geq n < n \wedge l_s = \mathbb{k} > 1 \wedge$$

$$j_{sa}^{ik} = j_i - 1 \wedge j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$j_{sa}^i \geq 3 \wedge j_{sa}^i \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1} \sum_{\binom{()}{j_s=1}}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i+l_i}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} - n_s - j_i - j_{ik} - 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - l_i - 1)! \cdot (n - j_i - l_i - 1)!} \cdot \\
& \frac{(l_i - j_{ik})!}{(j_{ik} - j_{ik})! \cdot (l_i - j_{sa}^{ik})!} \cdot \\
& \frac{(n_i + j_{sa}^{ik} - l_i - s)!}{(n_i + l_i - j_i - l_i - 1)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{()} \sum_{(j_s=1)}^{()} \\
& \sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j_i=s)}^{()} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}^{()} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$= \sum_{j_i=j_{sa}^{ik}+1}^{n} \sum_{j_i=l_{ik}+s-j_{sa}^{ik}}^{(j_i+j_{sa}^{ik}-s)} \sum_{j_i=s+1}^{(n_i-j_s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=l_{ik}+j_s-j_{sa}^{ik}+1)}^{(l_i)}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n_{ik}+1)}^{(n_{is}+1)}$$

$$\frac{(n_{is}+j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-l_{ik})!}{(n_{ik}+k_2-j_{ik}-1)! \cdot (n_{ik}-j_i+1)!} \cdot \dots$$

$$\frac{(n_{is}-l_{ik}-k_1-1)!}{(j_{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \dots$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \dots$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \dots$$

$$\frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \cdot \dots$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-j_{sa}^{ik})} \sum_{(j_i=s+1)}^{()}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge$$

$$s = (j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^s) \wedge$$

$$s > 3 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \dots \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=s+1)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
& \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - \mathbf{n} - 1)! \cdot (n - j_i)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(j_s - 2)!}{(j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + \mathbf{n} - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=l_s+s)}^{(l_i)} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
\end{aligned}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j_i+l_s-l_{ik}}^{(j_i+l_s-l_{ik})} \binom{(j_i+l_s-l_{ik})}{j_{ik}} \binom{(j_i+l_s-l_{ik})}{j_i+l_s-l_{ik}-j_{ik}}$$

$$\sum_{j_{ik}=j_i+l_s-l_{ik}}^{(j_i+l_s-l_{ik})} \binom{(j_i+l_s-l_{ik})}{j_{ik}} \binom{(j_i+l_s-l_{ik})}{j_i+l_s-l_{ik}-j_{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(n_s-n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$j_s > n - 1 \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$\sum_{k=1}^{\binom{D}{j_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{D}{j_s}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{ik}^s)}^{\binom{D}{j_i}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=l_k-j_s+1)}^{\binom{D}{n_i-j_s+1}}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{ik}}^{\binom{D}{n_{ik}}} \sum_{(n_{is}=n_{ik}+j_{ik}-j_{ik}^s)}^{\binom{D}{n_{is}}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik}^s - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik}^s - l_{k_2} - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(n_i - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s = D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{ik} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j_i \leq j_{ik} + j_{sa}^{ik} - 1 \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_i \wedge l_i + j_{sa}^{ik} - s > l_i \wedge$$

$$l_i \leq l_i + s - n \wedge$$

$$D \geq n \wedge l = l \wedge I = l_k > 1 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$$

$$j_{sa}^s > 3 \wedge j_{sa}^s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{\binom{D}{j_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{D}{j_s}}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_1})}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_i-n_s-1)!}{(j_i-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=1}^{\binom{()}{j_s=j_{ik}+l_s-l_{ik}}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}
 \end{aligned}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) =$$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(j_s=2)} \\
& \sum_{k=j_s+l_{ik}-l_s}^{(k=j_s+l_{ik}-l_s)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(j_i=j_{ik}+s-j_{sa}^{ik})} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} j_i = \sum_{j_{ik}=j_{ik}-l_s}^{(l_i)} (j_i = j_{ik} + s - j_{sa}^{ik})$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{s+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_{ik}+s-j_{sa}^{ik})}^{(n_{ik}+1)}$$

$$\sum_{k_1=0}^{n+l_k} \sum_{(n_{is}=n_{ik}+1)}$$

$$(\quad)$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 + k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i - j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < 0 \leq D + j_i + s - n - 1 \wedge$$

$$(D - n - n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{i-1}, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_{zS_{j_s, j_{ik}, j_i}} &= \sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)} \\
 &\sum_{j_{ik}=j_{s_a}^{ik}+1}^{j_i+j_{s_a}^{ik}-s} \sum_{(j_i=l_i+n-)}^{(l_{ik}+s-j_{s_a}^{ik})} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n+k_2-}^{n_{is}+j_s-j_{ik}-} \sum_{(n_s=n-j_i-)}^{(n_i+j_{ik}-k_2)} \\
 &\frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}+j_s-j_{ik}-k_1-1)!} \\
 &\frac{(n_{is}+j_s-n_{ik}-j_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1-1)!} \\
 &\frac{(n_i-n_s-1)!}{(n_{ik}+j_{ik}-n_s-j_i)!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
 &\frac{(l_i+j_{s_a}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{s_a}^{ik}-j_{ik}-s)!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)} \\
 &\sum_{j_{ik}=j_{s_a}^{ik}+1}^{l_{ik}} \sum_{(j_i=l_{ik}+s-j_{s_a}^{ik}+1)}^{(n)} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\frac{\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(j_s - 2)!}$$

$$\frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-j_{sa}^{ik})} \sum_{(j_i=l_i+n-D)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$f^z \mathcal{S}_{j_s, j_{ik}}^{j_i} = \sum_{k=1}^{\binom{(\cdot)}{j_s, j_{ik}}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{()} \sum_{j_s=j_{ik}+l_{ik}}^{()} \frac{()}{()} \cdot \\
& \sum_{j_{ik}=l_{ik}+1}^{l_s+j_{sa}^{ik}} \sum_{j_i=l_s+s}^{()} \frac{()}{()} \cdot \\
& \sum_{n_{is}=n+l_k}^{()} \sum_{j_i=j_s+1}^{()} \frac{()}{()} \cdot \\
& \sum_{n_{ik}=n_{ik}-j_{ik}-l_{k1}}^{()} \sum_{n_{is}=n+l_k-j_s+1}^{()} \frac{()}{()} \cdot \\
& \sum_{n_{ik}=n_{ik}-j_{ik}+1}^{()} \sum_{n_s=n-j_i+1}^{()} \frac{()}{()} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - l_{k1} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k1})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\sum_{k=1}^{\binom{D}{j_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{D-l_s+s-1}{j_i+l_s-l_{ik}-s}} \sum_{j_i=l_i+n-p}^{\binom{n}{n_i+l_k}} \sum_{(n_i=l_i+l_k-j_s+1)}^{\binom{n_i-j_s+1}{n_i+l_k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{ik}}^{\binom{n_i-j_s+1}{n_{ik}+j_{ik}-j_i}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s = D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j_i \leq j_{ik} + j_{sa}^{ik} - 1 \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_i \wedge l_i + j_{sa}^{ik} - s > l_i \wedge$$

$$D + 1 - n < l_i \leq D - l_s + s - 1 \wedge$$

$$D \geq n \wedge I = l_k > 1 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$$

$$j_{sa}^s > 3 \wedge s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{\binom{D}{j_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{D-l_s+s-1}{j_i+l_s-l_{ik}}}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(n)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_1)} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)!(n_i-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_i-n_{ik}-k_1-1)!}{(j_i-n_{ik}-1)!(n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - 1)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{(\quad)} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{(\quad)} \\
& \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_{ik}} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{(\quad)} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{(\quad)} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f_{zS} j_{sa}^{ik} &= \sum_{k=1}^{()} (j_s = j_{ik} + l_s - l_{ik}) \\ &\sum_{k=j_{sa}^{ik}+1}^{n+j_{sa}^{ik}-1} \sum_{(j_i=l_i+n-D)}^{(n)} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\ &\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ &\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\ &\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \end{aligned}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_s = j_{ik} + l_s - l_{ik})} \sum_{(j_i = j_{ik} + l_i - l_{ik})}$$

$$(n_i - j_s + 1)$$

$$\sum_{(j_s = j_{ik} + l_s - l_{ik})} \sum_{(j_i = j_{ik} + l_i - l_{ik})} \sum_{(n_{ik} = n_i + l_{ik} - j_s + 1)}$$

$$\sum_{(n_{ik} = n_i + l_{ik} - j_s + 1)} \sum_{(n_{ik} = n_i + l_{ik} - j_s + 1)} \sum_{(j_i = l_{ik} - 1)}$$

$$\sum_{(n_{ik} = n_i + l_{ik} - j_s + 1)} \sum_{(n_{ik} = n_i + l_{ik} - j_s + 1)} \sum_{(n_s = n - j_i + 1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - n_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

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$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_i)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}^{()} \sum_{(n_s=n_{ik}+j_i-j_{ik_2})}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^i)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - j_{sa}^i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_i \wedge j_{sa}^{ik} - s$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - j_{ik} = l_{ik} \wedge$

$D + n < l_i \leq l_s + s - n - 1$

$(n \geq n < n \wedge k > 0)$

$j_{sa}^{ik} - j_{sa}^i - 1 \wedge j_{sa}^s - j_{sa}^{ik} - 1$

$\{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$

$s > 3 \wedge s = s$

$k_z \cdot z = z \wedge k = k_1 + k_2 \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{()}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - l_{k_1})!} \cdot \\
 & \frac{(n_{i_k} - n_s - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_{i_k})!} \cdot \\
 & \frac{(n_s - j_i - n - l_s - 1)!}{(n_s - j_i - n - l_s - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{i_k} - l_{i_k} - s)!}{(j_{i_k} + l_{i_k} - j_{i_k} - l_{i_k})! \cdot (j_i + j_{i_k} - j_{i_k} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^l \sum_{(j_s=l_i+n-D-s+1)}^{(l_{i_k}-j_{s_a}^{i_k}+1)} \\
 & \sum_{j_{i_k}=j_s+l_{i_k}-l_s} \sum_{(j_i=j_{i_k}+s-j_{s_a}^{i_k})}^{(n)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{j_{ik} - j_i - l_{ik} - 1} \sum_{j_s = l_i + n - D - s + 1}^{j_{ik} - j_i - l_{ik} - k}$$

$$\sum_{k=j_s + l_{ik} - l_s}^{j_{ik} - j_i - l_{ik} - 1} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{(j_i = j_{ik} + s - j_{sa}^{ik})}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz^{S_{j_s, j_{ik}}} = \sum_{i=1}^{D-s} \sum_{(j_s=2)}^{(n)} \sum_{j_{ik}+l_{ik}-l_s}^{(n)} (j_i=l_i+n-D) \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_{is}+1)}$$

$$\frac{(n_{is}+j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-l_{ik}-1)!}{(n_{is}-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-l_{ik}-l_k-1)!}{(j_{ik}-l_{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_k)!}$$

$$\frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge$$

$$s = (j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^s) \wedge$$

$$s > 3 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z: z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=s+1)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + 1 - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_i)} \sum_{(j_i=l_s+s)}^{(l_i)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}
 \end{aligned}$$

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$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i}^{(n)} \sum_{j_{sa}^{ik}=j_{ik}+1}^{(l_s+s-1)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i}^{(n)} \sum_{(j_i=s+1)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(n)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$j_i \geq n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

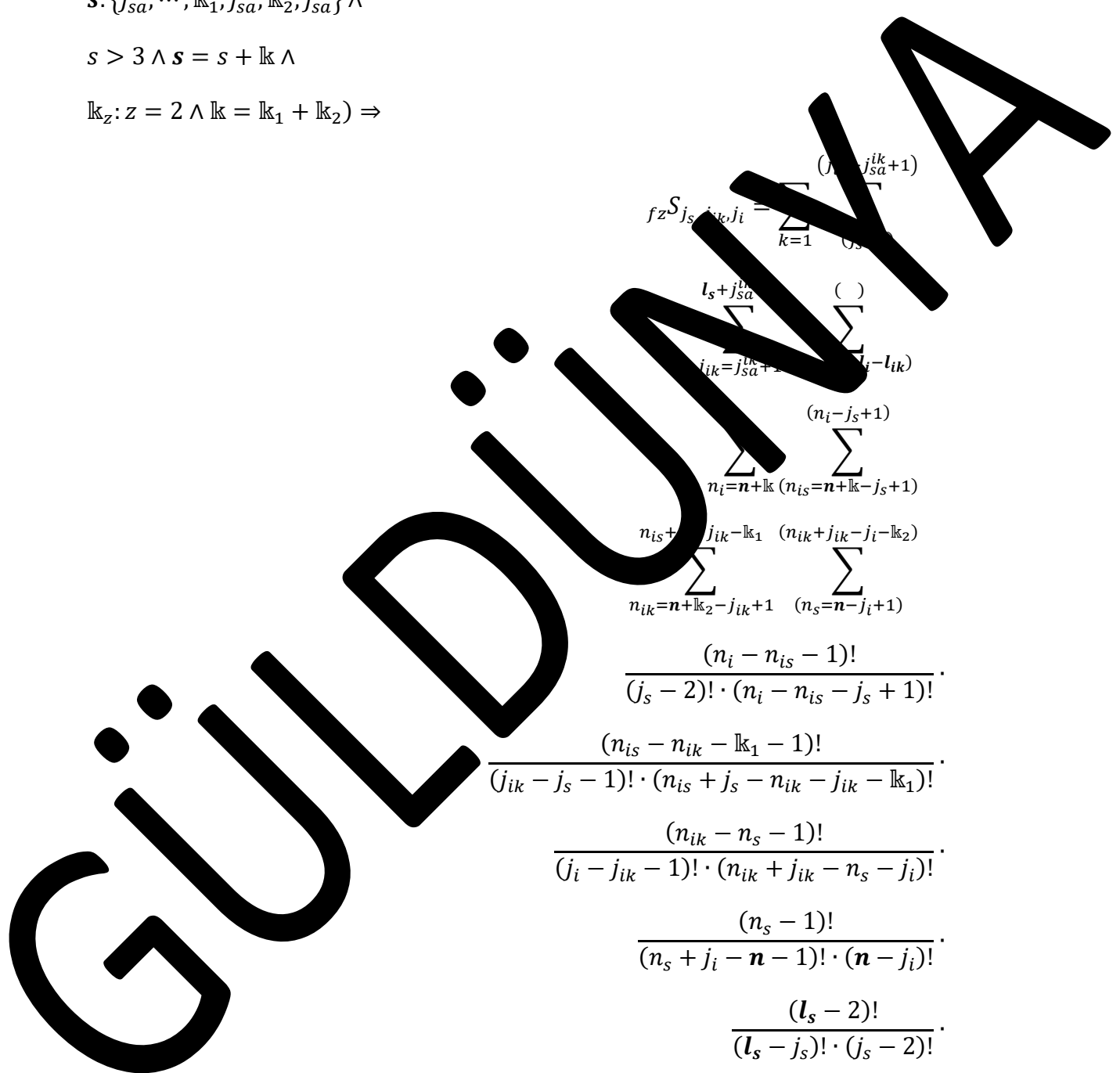
$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$



$$fz S_{j_s}^{i_k} j_i = \sum_{k=1}^{(j_s - j_{sa}^{ik} + 1)} \sum_{i_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik}} \sum_{i_i=l_{ik}}^{(n_i - j_s + 1)} \sum_{n_i=n+\mathbb{k}}^{(n_{is}+j_{ik}-\mathbb{k}_1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{(n_i - n_{is} - 1)!} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik} (j_i=j_{ik}+l_i-l_s)}^{l_{ik}} \sum_{()}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{is}+j_s-j_{ik}}^{(n_{ik}+j_{ik}-i-k_2)} \\
 & \sum_{n_{ik}=n+k_2-1}^{(n_s=n-j_i+1)} \\
 & \frac{(n_i-n_s-1)!}{(j_s-2)! \cdot (n_s-j_s+1)!} \\
 & \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_s-n_s-1)!}{(n_{ik}+j_{ik}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$

$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > 3 \wedge s = s + 1 \wedge$

$\mathbb{k}: z = 2 \wedge \dots = \mathbb{k}_1 + \dots \Rightarrow$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{\binom{()}{j_i=j_{ik}+l_i-l_{ik}}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$



$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+l_i-l_{ik})} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{j_{ik}, j_i} = \sum_{k=1}^{j_{ik} - j_{sa}^{ik} + 1} \sum_{(j_s=2)}^{(l_s+s-1)} \sum_{k=j_i+l_{ik}-l_i}^{(j_i=l_i+n-D)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{ik}} \sum_{(j_s+s)}$$

$$(n_i - j_s +$$

$$\sum_{n+l_k} \sum_{n+l_k - j_s + 1}$$

$$n_{is} - j_{ik} - l_{k_1} \quad j_i - l_{k_2}$$

$$\sum_{n+l_{k_2}-j_{ik}} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_s+s-1)} \sum_{(j_i=l_i+n-D)}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{()} \sum_{(n_s=n_{ik}+j_s-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - 2 \cdot j_s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - 2 \cdot j_s)!} \cdot \frac{(l_s - 2)!}{(l_s - 2)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_s - n - l_i)! \cdot (n - j_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 < j_{ik} \leq j_s + j_{sa}^{ik} - s$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - 1 = l_{ik} \wedge$

$D + j_{ik} - n < l_{ik} \wedge D + l_s + j_{sa}^{ik} - 1 = l_{ik} - 1$

$(n \geq n < n) \wedge l_k > 1$

$j_{sa}^{ik} - j_{sa}^i - 1 \wedge j_{sa}^s - j_{sa}^{ik} - 1$

$s \in \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$

$s > 3 \wedge s = j_{sa}^{ik} - l_k \wedge$

$l_{k_2} = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$

$$f_z^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!}$$

$$\frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_s=1}^{l_s} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_s=j_{ik}-j_{sa}^{ik}+1}$$

$$\sum_{j_s=1}^{l_s} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_s=j_{ik}-j_{sa}^{ik}+1} \binom{()}{j_s=j_{ik}+l_i-l_{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \binom{()}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}} = \sum_{i=1}^n \sum_{(j_s=2)}^{(D-s)} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(n-j_s)} \sum_{(n_i=n+\mathbb{k})}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{k=1}^n \sum_{(n_{is}=n_{ik}+1)}$$

$$\sum_{k_1=1}^{n_{is}+j_s-j_{ik}-1} \sum_{(n_{ik}+j_{ik}-j_i-l_{k_1})}^{()}$$

$$\frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!}$$

$$\frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_i=j_{ik}+l_i-l_{ik})}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s - n - 1 \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge$$

$$s = (j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^s) \wedge$$

$$s > 3 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \dots \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + 1 - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(n)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(n)} \sum_{(j_i=l_s+s)}^{(n)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}
 \end{aligned}$$

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$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j_{sa}^{ik} - l_{sa}}^{(j_s - j_{sa}^{ik} + 1)} \sum_{j_{sa}^{ik}=l_i + n + j_{sa} - D - s}^{(l_s + j_{sa} - 1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$n \geq 1 \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz \mathcal{S}_{j_s, i, k, j_i} = \sum_{k=1}^{\binom{j_s - j_{sa}^{ik} + 1}{j_s - j_{sa}^{ik} + 1}} \sum_{i=1}^{\binom{l_s + j_{sa}^{ik} - 1}{l_s + j_{sa}^{ik} - 1}} \sum_{j_i=1}^{\binom{n_i - j_s + 1}{n_i - j_s + 1}} \sum_{n_i=n+\mathbb{k}}^{\binom{n_i + j_{ik} - \mathbb{k}_1}{n_i + j_{ik} - \mathbb{k}_1}} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{\binom{n_{ik} + j_{ik} - j_i - \mathbb{k}_2}{n_{ik} + j_{ik} - j_i - \mathbb{k}_2}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1} \sum_{(j_s=2)}^{(l_s)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{i_1})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-1}^{n_{is}+j_s-j_{ik}} \sum_{(n_s=n-j_i+1)}^{(n_{is}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{is} - n_s - 1)!}{(n_{is} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1$

$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > 3 \wedge s = s + 1$

$\mathbb{k}_1 \cdot z = 2 \wedge \dots = \mathbb{k}_1 + \dots \Rightarrow$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(l_s - j_s - 1)! \cdot (l_s - j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^k + 1)!}{(j_s + l_{ik} - j_{sa}^k - 1)! \cdot (j_{ik} - j_{sa}^k - j_{sa}^k + 1)!} \cdot \\
 & \frac{(D - l_{ik})!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^k+1)}^{(l_s)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^k-1}^{n+j_{sa}^k-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{(l_s)} \sum_{j_s=l_i+n-l_s+1}^{(l_s)} \sum_{j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j_i+j_{sa}^{ik}} \sum_{j_s+1}^{(j_s+1)} \sum_{n_i+l_k \leq n_i+l_k-j_s+1} \sum_{j_s=n_i+j_{sa}^{ik}-l_k}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-l_k}^{()} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^S j_s j_{ik} j_i = \sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_i+\mathbb{k}}^{(\cdot)} \sum_{(j_i=s)}^{(\cdot)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_s=n-j_i+\mathbb{k}_2)}^{(n_{ik}+j_i-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_s - n_s - 1)!}{(j_i - j_i - 1)! \cdot (n_s + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\cdot)} \sum_{(j_i=s)}^{(\cdot)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\cdot)} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

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$$D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$f_{z^j} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\cdot)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)} \sum_{j_{ik}=j_{sa}^{ik}}^{(\cdot)} \sum_{(j_i=s)}^{(\cdot)} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{(\cdot)} \sum_{n_s=n_{ik}} \sum_{(k-j_i-l_{k_2})}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - l_i)! \cdot (2 \cdot j_s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - l_i)! \cdot (j_{sa}^s)!} \cdot \frac{(n - l_i)!}{(n - n)! \cdot (n - s)!}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz S_{j_s, \dots, j_i} = \sum_{k=1}^{()} (j_s = j_{ik} - j_{sa}^{ik} + 1)$$

$$\sum_{i_k = l_{ik} + n - D}^{j_i + j_{sa}^{ik}} \sum_{(j_i = l_i + n - D)}^{(n)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{(j_i = j_i + j_{sa}^{ik} - l_{ik} - D)}$$

$$\sum_{(n_i - j_s + 1)} \sum_{(n_i + k_1 + k_2 - j_s + 1)}$$

$$\sum_{(n_{ik} = n_{is} - j_{ik} - k_1)} \sum_{(n_{ik} + j_{ik} - j_i - k_2)}$$

$$\frac{(n_j + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i + k_1 + k_2)! \cdot (n_j + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} < j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_{zS} S_{j_s, j_{ik}, j_i} &= \sum_{k=1}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)} \\
 &\sum_{j_{ik} = l_s + n + j_{sa}^{ik} - D - 1}^{j_i + j_{sa}^{ik} - s} \sum_{(j_i = l_i + n - D)}^{(n)} \\
 &\sum_{n_i = n + k}^n \sum_{(n_i = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
 &\sum_{n_{ik} = n + k_2 - j_{ik} - 1}^{n_i + j_s - j_{ik} - 1} \sum_{(n_s = n - j_i + 1)}^{(n_i - k_2)} \\
 &\frac{(n_s - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot \\
 &\frac{(n_{ik} - n_{ik} - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_i + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

$$\sum_{k=1}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)}$$

$$\sum_{j_{ik} = j_i + j_{sa}^{ik} - s}^{(n)} \sum_{(j_i = l_i + n - D)}^{(n)}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = \mathbb{k}_1 + \mathbb{k} \wedge$$

$$\mathbb{k}_2: \mathbb{k} = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik} - k_2)!} \cdot \\
& \frac{(n_s - n_{is} - 1)!}{(n_s + j_{ik} - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(n_{is} - 2)!}{(n_s - j_s - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{ik} - l_{ik})! \cdot (l_i + j_{sa} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
\end{aligned}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{()} \sum_{j_{ik}=l_i}^{n+j_{sa}^{ik}} \sum_{j_{sa}^{ik}+D-s}^{()} (j_i=j_{ik}+s-j_{sa}^{ik}) \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - l_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$l_s \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{j_s=j_{sa}^{ik}+1}^{()} \sum_{j_i=l_i+n-D}^{()} \sum_{j_{ik}=n+j_{sa}^{ik}-D}^{()} \sum_{n_i=n-\mathbb{k}}^{()} \sum_{n_{is}=j_{ik}-\mathbb{k}_1}^{()} \sum_{n_{ik}=n-\mathbb{k}_2-j_{ik}+1}^{()} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n_{ik}-j_s+1)}^{(n_i-j_s+1)}$$

$$n_{is}+j_s-j_{ik}-l_{k_1}+j_{ik}-l_{k_2}$$

$$n_{ik}=n+l_{k_2}-j_{k_1}+1 \quad (n_s=n-j_i+l_{k_2})$$

$$\frac{(n_s - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - l_{k_2} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_i \wedge$

$(D \geq n < n \wedge l = \mathbb{k} > 0$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$

$s \geq 3 \wedge s = \mathbb{k}_1 + \mathbb{k} \wedge$

$\mathbb{k}_2: \mathbb{k} = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - \dots)!}{(n_s + j_i - \dots)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - 2)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + \dots - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{(n-s+1)} \sum_{l=0}^{D-s+1}$$

$$\sum_{j_s=j_s+j_{sa}^{ik}-1}^{(n-s+1)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$j_s > n - 1 \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_i+n-D)} \sum_{(j_s=l_s+n-D)}^{(l_i+n-D)} j_{ik}^{j_s} j_{sa}^{j_i-1} (j_i=l_i+n-D) \sum_{n_i=n+\mathbb{k}_1}^n \sum_{(j_s=j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{n}{j_i=j_{ik}+s-j_{sa}^{ik}}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{n_i-j_s+1}{n_{is}=n+l_k-j_s+1}}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{\binom{n_{ik}+j_{ik}-j_i-l_{k_1}}{n_s=j_i+1}}$$

$$\frac{\binom{n_i-1}{j_s-2} \cdot (n_i-n_{is}+1)!}{(n_i-n_{is}-1)!}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{ik}-l_{k_2})!}{(j_i-j_{ik}-n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!}$$

$$\frac{(n_i-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{()}{j_i=j_{ik}+s-j_{sa}^{ik}}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{n_i-j_s+1}{n_{is}=n+l_k-j_s+1}}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2)$$

$$fz \mathcal{S}_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = j_i + j_{sa}^{ik} - s}^{(n)} \sum_{(j_i = l_i + n - D)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\begin{aligned}
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_s=2}^{(n)} \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(n)} \sum_{j_{sa}^{ik}=j_{ik}-j_s+1}^{(n)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_i+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(n)} \\
& \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{\mathbb{k}} \sum_{j_s = \mathbb{k} - j_{sa}^{ik} + 1}^{n-D} \sum_{j_i = n - j_s}^{n + j_s} \sum_{j_{sa} = j_{ik} - D - j_{sa}^{ik} + 1}^{j_{ik} + s - j_{sa}^{ik}} \sum_{n_i = \mathbb{k} - j_s + 1}^n \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{n_i - j_{ik} - \mathbb{k}_1} \sum_{n_{ik} = \mathbb{k}_2 - j_{ik} + 1}^{n_{ik} + j_{ik} - j_i - \mathbb{k}_2} \sum_{n_s = n - j_i + 1}^{n_{ik} - n_s - \mathbb{k}_2 - 1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$\sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\cdot)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n_{ik}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_{ik}+j_{ik}-j_i=l_{k_2})}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + l_i \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq j_{sa}^{ik} + j_{sa}^{ik} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_i \wedge l_i + j_s - s = l_{k_2} \wedge$$

$$(D \geq n < n \wedge l_i = l_{k_1} = 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^{is} + 1 \wedge j_{sa}^s = j_{sa}^{is} - 1 \wedge$$

$$s: \{j_{sa}^{is}, j_{sa}^{ik}, \dots, j_{sa}^s\} \wedge$$

$$s > 3 \wedge s = l_{k_1} + l_{k_2} \wedge$$

$$l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_{sa}^{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_1)} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-k_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-k_2)!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_i-l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)} \cdot \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \cdot \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \cdot \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()} \cdot \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$\begin{aligned} & \sum_{j_{ik}=j_{sa}^{ik}-s}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{(n)} \\ & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\ & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_{ik}+...-D-j_{sa}^{ik})}^{(n)}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}$$

$$\sum_{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > n - n + 1 \wedge$$

$$2 \cdot j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} - s - j_{sa}^{ik} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n - l_s = l_k) \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > s \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n+l_{k_2}-j_{i+1})}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{ik}-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_i-l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=1}^j \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \dots + \mathbb{k}_2) \Rightarrow$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{ik} + 1)!} \cdot \\
 & \frac{(n - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{\mathbb{k}_2} \sum_{j_{sa}=j_{ik}+n-D-j_{sa}^{ik}+1}^{j_{sa}^{ik}-s} \binom{(\cdot)}{j_{ik}=j_s+j_{sa}^{ik}-1} \binom{(\cdot)}{j_i=j_{ik}+s-j_{sa}^{ik}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

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$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=i+j_{sa}^{ik}-1}^{(n-s+1)}$$

$$\sum_{l_{ik}+j_{ik}-j_i-l_{k_2}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}}^{(n_i-j_s+1)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 0 - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n) \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = l_{ik} + n - D}^{j_i + j_{sa}^{ik} - s} \sum_{(j_i = l_i + n - D)}^{(n)}$$

$$\sum_{n_i = n + l_k}^n \sum_{(n_{is} = n - l_k - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n + l_{k_2} - j_{ik} - 1}^{n_{is} + j_s - j_{ik} - 1} \sum_{(n_s = n - j_i - l_{k_2})}^{(n_i + j_{ik} - l_{k_2})}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_s - j_i - l_{k_2} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{()}$$

$$\sum_{j_{ik} = j_i + j_{sa}^{ik} - s} \sum_{(j_i = l_i + n - D)}^{(n)}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_i \wedge$

$(D \geq n < n \wedge l = \mathbb{k} > 0$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$

$s \cdot 3 \wedge s = \dots + \mathbb{k} \wedge$

$\mathbb{k}_z: \dots = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - 2)!}{(j_s - j_s - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_s - l_{ik} - s)!}{(j_{ik} - j_i - l_s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}
 \end{aligned}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\mathbf{n} + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$f_{z=2}^{s, j_{ik}, j_i} = \sum_{k=1}^{(l_i + n - D - s)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = l_{ik} + n - D}^{n + j_{sa}^{ik} - s} \sum_{(j_i = l_i + n - D)}^{(n)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(n-s+1)} \sum_{j=0}^{(n-s+1)-k} \frac{(n-s+1)!}{(n-s+1-k)! \cdot j!} \cdot \\
 & \sum_{j_i=j_{ik}+s-j_{sa}^{ik}-1}^{n+l_i-s} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(n)} \frac{(n)!}{(n-j_i)! \cdot j_i!} \cdot \\
 & \sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)} \frac{(n_i - j_s + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

GÜLDÜNYA

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{i=l_i+n-s+1}^{s+1}$$

$$\sum_{i=j_s+j_{sa}^{ik}-1}^{j_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{i=0}^n$$

$$\sum_{n_i+l_k}^{n_i+l_k} (n_{is}=n+l_k-j_s+1)$$

$$\sum_{i=n_{is}+j_{ik}-l_{k_1}}^{()} (n_s=n_{ik}+j_{ik}-j_i-l_{k_2})$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - 1 + 1 \wedge$$

$$2 \leq j_s < j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_s \leq j_i \leq n \wedge$$

$$-j_{sa}^{ik} - 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{\mathcal{S}_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n}^n \sum_{(n_i=j_s+1)}^{(n+j_s+1)}$$

$$\sum_{n_{is}+j_s-1}^{n_{ik}+j_{ik}} \sum_{(n_{ik}+j_{ik})}^{(n_{ik}+j_{ik})}$$

$$\sum_{(n_{ik}+j_{ik})}^{(n_{ik}+j_{ik})} \sum_{(n_{ik}+j_{ik})}^{(n_{ik}+j_{ik})}$$

$$\frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - j_s - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(n)} \sum_{(j_i=l_i+n-D)}^{(n)}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$

$(D \geq n < n \wedge l = \mathbb{k} > 0$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$

$s \geq 3 \wedge s = \mathbb{k}_1 + \mathbb{k}_2 \wedge$

$\mathbb{k}_2: \mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - \dots)!}{(n_s + j_s - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - 2)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + \dots - \mathbf{n} - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{(\dots)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\dots)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(\dots)} \sum_{(j_i=l_i+n-D)}^{(n)} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(\dots)} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

GÜLDÜMÜŞKA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{j_{sa}^{ik}, j_i} = \sum_{k=1}^{()} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$l_i - j_{sa}^{ik} - D - s - 1 \sum_{j_{ik} = l_{ik} + n - D} \sum_{(j_i = l_i + n - D)}^{(n)}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \\
 & \sum_{i=0}^{n+l_s} \sum_{i=n+j_{sa}^{ik}-D}^{i=j_{ik}+s-j_{sa}^{ik}} \\
 & \sum_{i_s=0}^{n+l_s} \sum_{i_s+l_k}^{(n_{is}=n+l_k-j_s+1)} \\
 & \sum_{i_{ik}=0}^{n_{is}-j_{ik}-l_{k1}} \sum_{(n_{ik}+j_{ik}-j_i-l_{k2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k2})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_i^l)}^{(\cdot)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n-k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{ik}+j_{ik}-j_i)}^{(\cdot)} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - 2 \cdot j_{sa}^s)!} \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > D - n \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n + j_{sa}^{ik} - s \wedge$

$j_{ik} + j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = n - l_i + j_{sa}^{ik} - s > l_i \wedge$

$(D \geq n < n \wedge I = k_1 = 0 \wedge$

$j_{sa}^{ik} < j_{sa}^{il} - 1 \wedge j_{sa}^s = j_{sa}^{il} - 1 \wedge$

$s: \{j_{sa}^{is}, j_{sa}^{ik}, j_{sa}^{il}\} \wedge$

$s > 3 \wedge s = k_1 + k_2 \wedge$

$(z = 2 \wedge k = k_1 + k_2) \Rightarrow$

$$f_z^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-s-1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(n)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_1)} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-2)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-k_2-2)!}{(j_i-j_{ik}-2)! \cdot (n_{ik}-j_{ik}-n_s-j_i-k_2)!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{\binom{()}{}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{()}{}} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - s)! \cdot (j_i + j_{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{(\cdot)} \\
& \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{n + j_{sa}^{ik} - s} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{(\cdot)} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{(\cdot)} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$f_z S_{j_s}^{(l_i+n-D-s)} \sum_{k=1}^{j_{sa}^{ik}+1} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} (j_i=l_i+n-D) \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

$$\sum_{k=1}^n \sum_{(n_{is}=n_{ik}+1)}^{(n_{ik}+1)}$$

$$\frac{(n_{is}+j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-l_{ik}-1)!}{(n_{ik}+k_2-j_{ik}-1)! \cdot (n_{ik}-j_i+1)!} \cdot \dots \cdot (n_{is}-1)!$$

$$\frac{(n_{is}-2)! \cdot \dots \cdot (n_{is}-j_s+1)!}{(n_{is}-1)!}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(n_{is}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{is}-n_s-k_2-1)!}{(j_i-n_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k_2)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{()} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = \mathbb{k}_1 + \mathbb{k} \wedge$$

$$\mathbb{k}_2: \mathbb{k} = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_s - j_i - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - 1)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{ik} - l_{ik})! \cdot (l_i + j_{sa} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}
 \end{aligned}$$

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$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{(n-s+1)} \sum_{l=D-s+1}^{(n-s+1)}$$

$$\sum_{j_s+l_{ik}-s}^{(n-s+1)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n-s+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(n-s+1)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$j_s \geq n - \mathbb{k}_1 \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_{ik}-j_{sa}^{ik}+1)}^{(l_s+n-D)} \dots$$

$$\dots \sum_{j_{ik}+l_{ik}-l_i}^{(j_{ik}+l_{ik}-l_i)} \sum_{(j_{ik}+l_{ik}-l_i)}^{(n)} \sum_{(j_{ik}+l_{ik}-l_i)}^{(n_i-j_s+1)} \dots$$

$$\dots \sum_{n_i=n+l_s}^{(n_i-n+l_s)} \sum_{(n_i-n+l_s)}^{(n_i-j_s+1)} \sum_{n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \dots$$

$$\dots \sum_{n_{ik}=j_{ik}-j_i-\mathbb{k}_2+1}^{(n_{ik}=j_{ik}-j_i-\mathbb{k}_2+1)} \sum_{(n_{ik}=j_{ik}-j_i-\mathbb{k}_2+1)}^{(n_s=n-j_i+1)} \dots$$

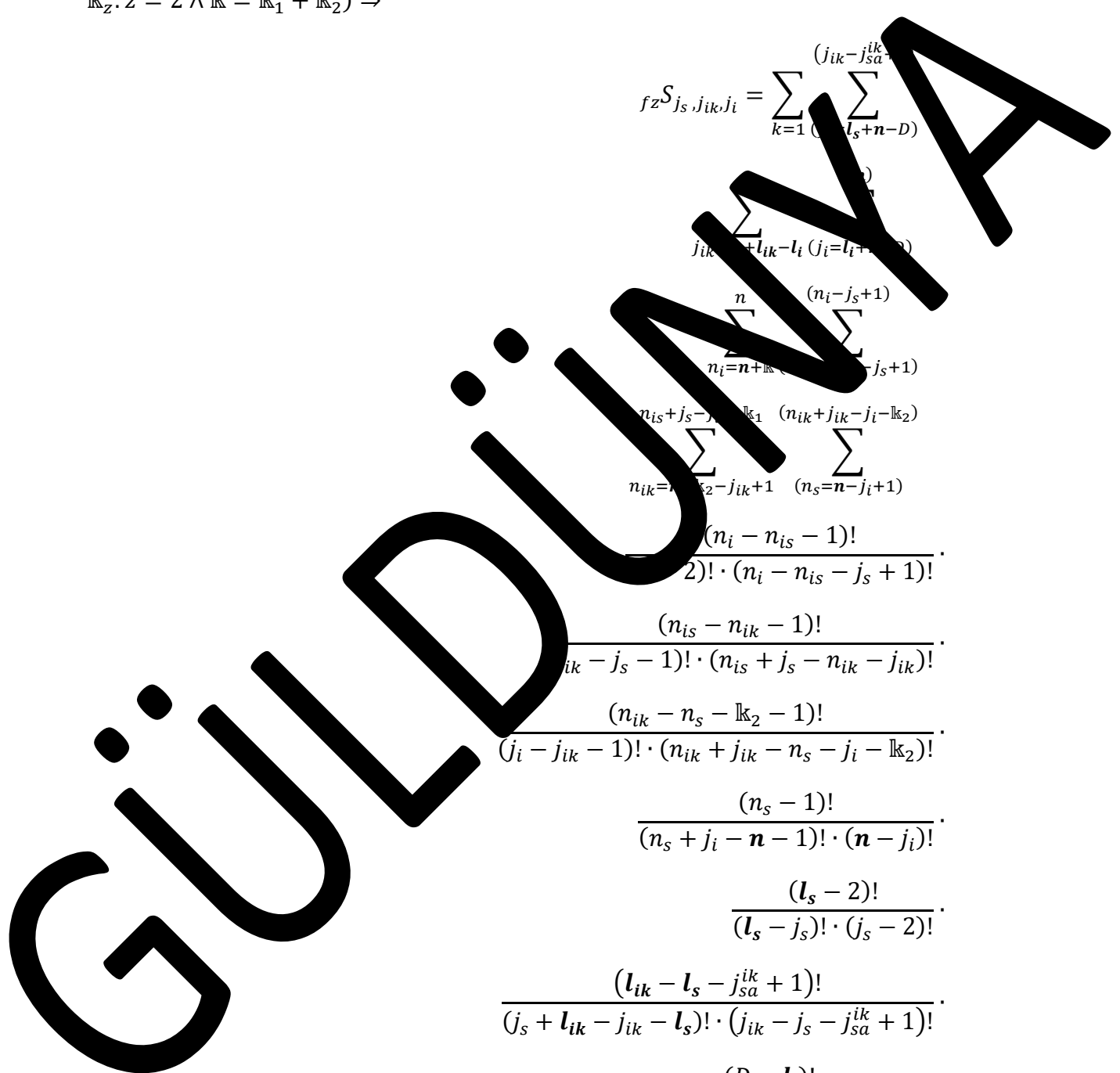
$$\dots \frac{(n_i - n_{is} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \dots$$

$$\dots \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \dots$$

$$\dots \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \dots$$

$$\dots \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \dots$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$



$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_s-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - 2 \cdot j_s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - 2 \cdot j_s)!} \cdot \frac{(l_s - 2)!}{(l_s - 2)! \cdot (j_s - 2)!} \cdot \frac{(D - j_s - n - l_i)! \cdot (n - j_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 < j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - 1 = l_{ik} \wedge$$

$$(D \geq n < n \wedge l_s > 0 \wedge$$

$$j_s < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_1} = l_{k_2} - 2) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!}$$

$$\frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} + l_{k_1} - j_{sa}^{ik} - j_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{\binom{()}{j_i=j_{ik}+l_i-l_{ik}}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z=2}^{S_{j_{ik}, j_i}} = \sum_{k=1}^{(l_i + n - D - s)} \sum_{(j_s = l_s + n - D)}^{(n + j_{sa}^{ik} - s)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(n)} \sum_{(j_i = j_{ik} + l_i - l_{ik})}^{(n_i - j_s + 1)} \sum_{(n_i = n + \mathbb{k})}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \sum_{(n_s = n - j_i + 1)}^{(n_i - n_{is} - 1)!} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_s=l_i+n-D-s}^{(n-s)} \sum_{j_{ik}=j_s-1}^{(j_{ik}-j_s-1)} \sum_{j_{sa}^{ik}=j_{ik}-j_s-1}^{(j_{sa}^{ik}-j_{ik}+1)} \sum_{n_i=n+l_k}^{(n_i-j_s+1)} \sum_{n_{is}=n+l_k-j_s+1}^{(n_{is}-j_{ik}-l_{k_1})} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \sum_{n_s=n-j_i+1}^{(n_s-n-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_i=j_{ik}+l_i-l_i)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n-k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-1}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik})! \cdot (n - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - 1)! \cdot (2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n - j_{sa}^{ik} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j_i \leq n - l_i \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > 0 \wedge l_i + j_{ik} - s = l_i \wedge$$

$$(D - n < n \wedge I = k_1 + k_2 = 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, k_1, j_{sa}^{ik}, j_{sa}^s\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k: z = 2, k = k_1 + k_2 \Rightarrow$$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{\binom{n}{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}} \sum_{n_i=n+l_k}^n \sum_{\binom{n_i-j_s+1}{n_{is}=n+l_k-j_s+1}} \sum_{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{\binom{n_{ik}+j_{ik}-j_i-l_{k_2}}{n_s=n_{ik}+j_{ik}+1}} \frac{\binom{n_i-1}{j_s-2} \binom{n_i-n_{is}+1}{n_{is}-n_{ik}-1}}{(j_{ik}-j_s)!(n_{is}+j_s-n_{ik}-j_{ik})!} \frac{\binom{n_{ik}-l_{k_2}}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!}}{\binom{n_i-1}{(n_s)!(j_i-n-1)! \cdot (n-j_i)!}} \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_{ik}-j_s-l_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=1} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{\binom{n}{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{n_i-j_s+1}{n_{is}=n+l_k-j_s+1}}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2)$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = l_{ik} + n - D}^{n + j_{sa}^{ik} - s} \sum_{(j_i = j_{ik} + l_i - l_{ik})}^{()}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\begin{aligned}
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_i = l_{ik} + n - D}^{n - \mathbb{k}_2 - s} \sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{(\cdot)} \cdot \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \cdot \\
& \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{(\cdot)} \cdot \\
& \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - j_s - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$n \leq n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

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$$\begin{aligned}
 & \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(n-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}-1}^{n_{ik}+j_s-j_{ik}-l_{k_2}} \sum_{(n_s=n-j_i+l_{k_2})}^{(n_s-j_i+l_{k_2})} \\
 & \frac{(n_s - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{ik} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - j_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(n-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{()} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + 1 \wedge$$

$$\mathbb{k} : z = 2 \wedge (\mathbb{k} = \mathbb{k}_1 + \dots) \Rightarrow$$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=s+1)}^{(l_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{l_{ik}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\cdot)} \\
& \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik}} \sum_{(j_i = l_{ik} + s - j_{sa}^{ik} + 1)}^{(l_i)} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{j_s=j_{ik}^{ik}+1}^{()} (j_s=j_{ik}^{ik}+1)$$

$$\sum_{j_{ik}=j_i+j_s}^{()} \sum_{(j_i=s+1)}^{()} (j_i=s+1)$$

$$\sum_{n_i=1}^n \sum_{k=1}^k (n_{is}=n+k-j_s+1)$$

$$\sum_{n_{is}=j_{ik}-k_1}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-k_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n_{is} - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_s \leq j_i \leq n \wedge$$

$$j_{ik} - 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{(j_i+j_{sa}^{ik}-l_s+s-1)}^{(l_s+s-1)}$$

$$\sum_{(j_{ik}-j_{sa}^{ik}+1)}^{(l_s+s+1)}$$

$$\sum_{(n_i-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{(n+n_k)}^{(n+n_k-j_s+1)}$$

$$\sum_{(n_{is}-j_{ik}-k_1)}^{(j_i-k_2)}$$

$$\sum_{(n+n_k-j_{ik}-1)}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=l_s+s)}^{(l_i)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-2)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-l_{k_2}-2)!}{(j_i-j_{ik}-2)! \cdot (n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!} \\
 & \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=s+1)}^{(l_s+s-1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()}
 \end{aligned}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) =$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_s=1}^{l_{ik}} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_s} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{(j_s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(j_i)} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{\binom{D-l_i}{j_i-n-l_i}} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{\binom{D-l_i}{j_i-n-l_i}} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{j_i=j_{ik}-j_{sa}^{ik}}^{\binom{D-l_i}{j_i-n-l_i}} \frac{(n_i - n - \mathbb{k}_1 + j_{ik} - \mathbb{k}_1)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 0 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} - s - j_{sa}^{ik} \leq j_i - n \wedge$$

$$l_s - j_{sa}^{ik} - 1 = l_s \wedge l_i - j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - 1 \wedge$$

$$(D \geq n - 1 \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_{z^S} S_{j_s, j_{ik}, j_i} &= \sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(l_{ik} - j_{sa}^{ik} + 1)} \\
 &\sum_{j_{ik}=j_s + j_{sa}^{ik} - 1}^{(l_i)} \sum_{(j_i=j_{ik} + s - j_{sa}^{ik})}^{(l_i)} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n+k_2-j_{sa}^{ik}-1}^{n_i+j_s-j_{ik}-1} \sum_{(n_s=n-j_i-j_{sa}^{ik})}^{n_i+j_{ik}-j_{sa}^{ik}-k_2} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} - j_s + 1)!} \\
 &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \\
 &\frac{(n_{ik} - n_{ik} - k_2 - 1)!}{(j_i - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 &\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$\sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(l_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j_s + j_{sa}^{ik} - 1}^{(l_i)} \sum_{(j_i=j_{ik} + s - j_{sa}^{ik})}^{(l_i)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{(\cdot)}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + 1 \wedge$$

$$\mathbb{k} : z = 2 \wedge (\mathbb{k} = \mathbb{k}_1 + \dots) \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_i)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{is}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - l_i - s)! \cdot (j_i + j_{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{(l_s)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$f_z S_{j_s, \dots, j_i} = \sum_{k=1}^{\binom{()}{j_s}} (j_s = j_{ik} - j_{sa}^{ik} + 1)$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_s-s} \sum_{(j_i=l_i+n-D)}^{(l_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{()}$$

$$\sum_{j_{ik} - j_{sa}^{ik} + 1}^{l_{ik}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{()}$$

$$\sum_{(n_i - j_s + 1)}$$

$$\sum_{(n_i - j_s + 1)}$$

$$\sum_{(n_i - j_s + 1)}$$

$$\sum_{(n_s = n - j_i + 1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_s - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

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$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(l_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_i)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_i-l_{k_2})}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s)}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_i \wedge j_{sa}^{ik} - s$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - j_{ik} = l_{k_1} \wedge$$

$$D + n < l_i \leq D - l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$(n \geq n < n \wedge l_s = l_k > 0)$$

$$j_{sa}^{ik} - j_{sa}^i - 1 \wedge j_{sa}^s - j_{sa}^{ik} - 1)$$

$$\{j_{sa}^s, l_{k_1}, l_{k_2}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s$$

$$l_{k_2} \cdot z = z \wedge l_k = l_{k_1} + l_{k_2}) \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!}$$

$$\frac{(n_s - j_i - n - l_s - 1)!}{(n_s - j_i - n - l_s - 1 - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{ik} - l_{ik} - s)!}{(j_{ik} + l_{ik} - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{\binom{()}{}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=l_s+s)}^{\binom{n}{}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

GÜLDÜMÜYA

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_s=1}^{j_{ik} - j_{sa}^{ik} + 1} \sum_{j_i=l_i+n-D}^{l_s+s-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(\quad)} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_i = l_i + n - D)} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(n)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
 & \sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_{i_s}+1)} \\
 & \sum_{n_{ik}+l_{k_2}-j_{ik}}^{n_{is}+j_s-j_{ik}-l_{k_2}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_{ik}-n_s-1)!}{(n_{ik}-2)! \cdot (n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(n_{is}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_s-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-l_{k_2})!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(n)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_i \wedge$

$D + s - n < l_i \leq D + l_i - s - n - j_{sa}^{ik}$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge$

$s = (j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}) \wedge$

$s > 3 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z: z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - \mathbb{k}_2)!} \\
 & \frac{(n_s - \dots)!}{(n_s + j_i - \dots)! \cdot (n - j_i)!} \\
 & \frac{(j_s - 2)!}{(j_s - 2)!} \\
 & \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa} - j_{ik} - s)!} \\
 & \frac{(D - l_i)!}{(D + \dots - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(\dots)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\dots)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}
 \end{aligned}$$

GÜLDÜMÜKKA

$$\begin{aligned}
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{(\cdot)} \\
& \sum_{j_{ik} = l_i}^{l_s + j_s} \sum_{j_{sa}^{ik} = D - s}^{(\cdot)} (j_i = j_{ik} + s - j_{sa}^{ik}) \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{(\cdot)} \\
& \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - l_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$l_i \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz^s j_s j_{ik} j_i \sum_{k=1}^{(n-D-s)} \sum_{j_{ik}=j_s}^{(n)} \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜNYA

GÜLDENWASSER

$$\sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+k_2-j_{ik}-1}^{(n_i+j_s-j_{ik}-n_{is}+j_{ik}-k_2)} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{ik} - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{(\cdot)}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_s \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + 1 \wedge$$

$$\mathbb{k} : z = 2 \wedge \dots = \mathbb{k}_1 + \dots \Rightarrow$$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(l_s)} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_s)} \\
& \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(n)} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{(n)} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{(l_s)} \sum_{j_s=l_i+n-k-s+1}^{(l_s)} \sum_{j_{ik}=j_s+j_{sa}^{ik}}^{(l_s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(l_s)} \sum_{n_i=n+k}^{(l_s)} \sum_{n_{is}=n+k-j_s+1}^{(l_s)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-k-k_1}^{(l_s)} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}^{(l_s)} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$n \geq n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_{ik} \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$s > 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(l_s - j_{sa}^{ik} + 1)} \sum_{j_{ik}=j_i + j_{sa}^{ik}}^{(l_s + s - j_i - j_{sa}^{ik} + 1)} \sum_{j_i=s+1}^{(n_i - j_i + 1)} \frac{(n_i - j_i + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - j_i - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - \mathbb{k} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \sum_{j_{ik}=j_i + j_{sa}^{ik} - s}^{(l_i)} \sum_{(j_i=l_s + s)}^{(l_i)}$$

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$$\begin{aligned}
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - j_i - n - \mathbb{k}_2 - 1)!}{(n_s - j_i - n - \mathbb{k}_2 - 1)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} + j_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{\binom{D}{j_s}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{\binom{D}{j_s}} \\
 & \sum_{j_{ik} = j_i + j_{sa}^{ik} - s}^{(l_s + s - 1)} \sum_{(j_i = s + 1)}^{(l_s + s - 1)} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s + 1)} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{\binom{D}{j_s}} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot
 \end{aligned}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz^{\mathcal{D}_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_s=2}^{(l_s)} \sum_{j_{ik}=l_s+j_{sa}^{ik}}^{(n)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(n)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_i = j_{sa}^{ik} + s - j_{sa}^{ik})}^{()}$$

$$\sum_{n + \mathbb{k}}^{(n_i + 1)} (n_i + 1)$$

$$\sum_{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_i - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge l_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} - s - j_{sa}^{ik} \leq j_i - n \wedge$$

$$l_s - j_{sa}^{ik} - 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n - 1 \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \sum_{(n_{ik}+j_{ik}-n_{i-k_2})}^{(n_{is}+j_{ik}-n_{i-k_2})}$$

$$\frac{(n_i - n_{i-k_2} - 1)!}{(j_s - 2)! \cdot (n_{i-k_2} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i-k_2} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{i-k_2} - 1)!}{(j_i - j_{i-k_2} - 1)! \cdot (n_{i-k_2} + j_{ik} - n_s - j_i - l_{k_2})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{(\cdot)}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$

$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > 3 \wedge s = s + 1 \wedge$

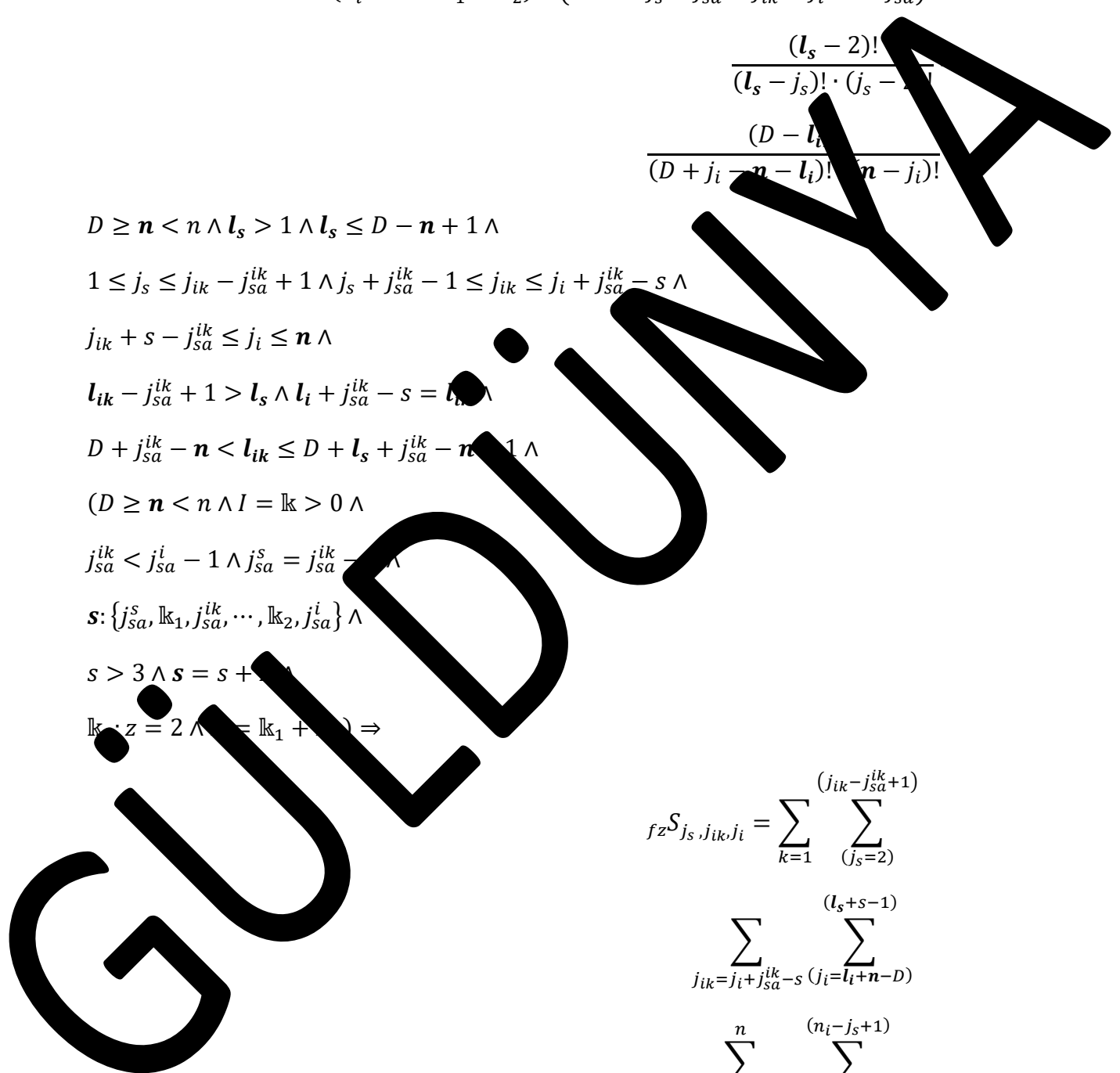
$\mathbb{k}: z = 2 \wedge (\mathbb{k} = \mathbb{k}_1 + \dots) \Rightarrow$

$$fzS_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-1)} \sum_{(j_i=l_i+n-D)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$



$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(l_s - j_s - 1)! \cdot (l_s - j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_s - j_{sa} + 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(n)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(n)} \sum_{(j_i=l_s+s)}^{(n)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{j_s=j_{ik} - j_{sa}^{ik} + 1}^{()}$$

$$\sum_{j_{ik}=j_i + j_s - (j_i = l_i + n - D)}^{()}$$

$$\sum_{n_i = n + k}^{()} \sum_{(n_{is} = n + k - j_s + 1)}^{()}$$

$$\sum_{=n_{is} + j_s - k - k_1}^{()} \sum_{(n_s = n_{ik} + j_{ik} - j_i - k_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{()}$$

$$\sum_{n_i = \mathbb{k} (n_{is} = n + \mathbb{k} - j_s)}^{(n_i - \mathbb{k} - 1)}$$

$$\sum_{n_{ik} = n - j_{ik} + 1}^{(n_s - j_{ik} - \mathbb{k}_1 + j_{ik} - j_i - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - \mathbb{k} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik} = l_s + j_{sa}^{ik}}^{n + j_{sa}^{ik} - s} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{()}$$

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$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!}$$

$$\frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} + l_{k_1} - j_{sa}^{ik} - j_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{\binom{()}{j_i=j_{ik}+s-j_{sa}^{ik}}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

GÜLDÜMÜ

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_i + n - D - s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=0}^{(l_s)} \sum_{l_i=k}^{(D-s+1)} \sum_{j_i=j_s+j_{sa}^{ik}-1}^{n_{ik}-s} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(n)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j_{ik}=k+s-j_{sa}^{ik})}^{(n_{ik}=n_{is}+1)} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < 0 \leq D + j_i + s - n - 1 \wedge$$

$$(D - n - n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{ik_1}, j_{sa}^{ik_2}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_{z^S} S_{j_s, j_{ik}, j_i} &= \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)} \\
 &\sum_{j_{ik} = j_i + j_{sa}^{ik} - s}^{(l_s + s - 1)} \sum_{(j_i = l_{ik} + n + s - D - j_{ik})}^{(l_s + s - 1)} \\
 &\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
 &\sum_{n_{ik} = n + k_2 - j_{ik} - 1}^{n_{is} + j_s - j_{ik} - 1} \sum_{(n_s = n - j_i + 1)}^{n_i + j_s - j_{ik} - 1} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} - j_s + 1)!} \\
 &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \\
 &\frac{(n_{ik} - n_{ik} - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 &\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik} = j_i + j_{sa}^{ik} - s}^{(n)} \sum_{(j_i = l_s + s)}^{(n)}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)}$$

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$$\begin{aligned}
& \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_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_s)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + \mathbf{n} - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)} \\
& \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-1)} \sum_{(j_i=l_{ik}+\mathbf{n}+s-D-j_{sa}^{ik})}^{(\)} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\)} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(\)} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\mathbf{n} + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$f_{zS} j_{ik} j_i = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})} ()$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{(l_s)} \binom{(l_s)}{j_s - k} \cdot \\
 & \sum_{j_{sa}^{ik} = n + j_{sa}^{ik} - s}^{(n + j_{sa}^{ik} - s)} \binom{(\quad)}{j_{sa}^{ik} - s} \cdot \\
 & \sum_{j_{ik} = l_s + j_{sa}^{ik}}^{(l_s + j_{sa}^{ik})} \binom{(\quad)}{j_{ik} - j_s - j_{sa}^{ik}} \cdot \\
 & \sum_{n_i = n + k}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \cdot \\
 & \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{(n - j_{ik} - k_1)} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\sum_{k=1}^{\binom{D}{k}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{D-k}{j_s}} \sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{\binom{D-k-j_s}{j_i}} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n_{ik}-j_s+1)}^{\binom{n_i-j_s+1}{n_{is}}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot 2 \cdot j_s! \cdot (j_{sa}^{ik} - j_{ik})! \cdot 2 \cdot j_{sa}^s!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq n - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n - l_i \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > 0 \wedge l_i + j_s - s = l_i \wedge$$

$$D + n - n < l_i \leq D - l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge I = k) \wedge$$

$$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$$2 \wedge l_i = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{\binom{D}{k}} \sum_{(j_s=2)}^{\binom{l_{ik}+n-D-j_{sa}^{ik}}{j_s}}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \binom{(\quad)}{\sum_{j_i=j_{ik}+s-j_{sa}^{ik}}} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s-j_s-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{\binom{n_i-1}{(j_s-2)} \cdot (n_i-n_{is}-1)!}{(n_{is}-n_{ik}-1)!} \cdot \frac{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}{(n_{ik}-n_{ik}-l_{k_2}-1)!} \\
 & \frac{(n_{ik}-n_{ik}-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_i-l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^s \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \binom{(\quad)}{\sum_{j_i=j_{ik}+s-j_{sa}^{ik}}} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik} - l_{k_2})!} \cdot \\
 & \frac{(n_s - n_{is} - 1)!}{(n_s + j_{ik} - n - 1)! \cdot (n - n_{is} - j_{ik} - 1)!} \cdot \\
 & \frac{(l_s - 2)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (n - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_s)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(j_s)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(j_s)} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(j_s)} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{ik}, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^{ik}\}$$

$$s > j_{sa}^{ik} = s + k \wedge$$

$$k_z: z = 2, \dots, k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i + j_{sa}^{ik} - s} \sum_{(j_i=s+1)}^{(l_s + s - 1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i - j_s + 1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_s - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} - j_i - l_{ik} - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=l_s+s)}^{(l_i)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot$$

$$\frac{(l_s + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_{ik} - l_s - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=1}^{(\)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_i + j_{sa}^{ik} - s}^{(l_s + s - 1)} \sum_{(j_i = s + 1)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{(\)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1) \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + 1$$

$$\mathbb{k}: z = 2 \wedge \dots = \mathbb{k}_1 + \dots) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_i)}^{(l_i)} (j_i = j_{ik} + s - j_{sa}^{ik})$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{jk} - l_s - j_{sa} + 1)!}{(j_s + l_{jk} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{l_s - j_s - 1} \sum_{j_{sa}^{ik+1}}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s - j_s - 1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-k_2)}^{()}$$

$$\frac{(n_i - n - k_1 - k_2 - 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(l_s > n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2)$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 1)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{sa}^{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$f_{s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_s-1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - l_{ik} - s)!}$$

$$\frac{(D - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{j_s=2}^{(l_s)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}} \sum_{j_i=l_s+s}^{(n)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

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$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1, \dots, +s-1)}$$

$$\sum_{(j_i = j_i + j_{sa}^{ik}, \dots, l_i - D)}$$

$$\sum_{(n_i - j_s + 1, \dots, +k_1 (n_i - j_s + 1 + k_1 - j_s + 1))}$$

$$\sum_{(n_{ik} = n_{is} - j_{ik} - k_1, \dots, n_{ik} + j_{ik} - j_i - k_2)}$$

$$\frac{(n_j + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2)! \cdot (n_j + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n > l_i \leq D + l_s + s - n - 1) \vee$$

$$(n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz S_{j_s, j_i} = \sum_{k=1}^{(j_s - j_{sa}^{ik+1})} \frac{\sum_{i_{ik}=l_{ik}+n}^{l_s + j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^{(n)} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+\mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_{ik} - \mathbb{k}_1} \sum_{n_s=n-j_i+1}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{(j_{ik}+j_{sa}^{ik})}^{(n)} \\
 & \sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_{is}+1)} \\
 & \sum_{n_{is}+j_s-j_{ik}}^{(n_{ik}+j_{ik}-j_i-l_{ik})} \sum_{(n_{is}-j_i+1)}^{(n_{is}-1)} \\
 & \frac{(n_{is}-2)! \cdot (n_{is}-j_s+1)!}{(n_{is}-1)!} \\
 & \frac{(n_{is}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}{(n_{is}-n_s-l_{k_2}-1)!} \\
 & \frac{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-l_{k_2})!}{(n_s-1)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}
 \end{aligned}$$

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$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_i)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()} \sum_{(n_s=n_{ik}+j_i-j_{ik}-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^i)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - j_{sa}^i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1) \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_i \wedge l_i + j_{sa}^{ik} - s \leq l_{ik} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$

$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1) \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_i - s + 1 > l_s$

$(D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$

$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1) \wedge$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$

$$\begin{aligned}
 f_{z^S}^{j_s, j_{ik}, j_i} &= \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{(n)} \\
 &\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}} \sum_{(j_i=l_i+n-D)}^{(n)} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=k-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n+k_2}^{n_{is}+j_s-j_{ik}} \sum_{(n_{ik}+j_{ik}=i-k_2)}^{(n_{ik}+j_{ik}=i-k_2)} \\
 &\sum_{(j_i=l_i+n-D)}^{(n_{ik}=n+k_2+1)} \sum_{(n_s=n-j_i)}^{(n_s=n-j_i)} \\
 &\frac{(n_i - n_s - 1)!}{(j_s - 2)! \cdot (n_s - n_{ik} - j_s + 1)!} \\
 &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_s + j_s - n_{ik} - j_{ik})!} \\
 &\frac{(n_{ik} - n_{ik_2} - 1)!}{(j_i - n_{ik_2} - 1)! \cdot (n_s + j_{ik} - n_s - j_i - k_2)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 &\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 &\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)} \\
 &\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{i_s} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - j_i)!}{(n_s - j_i - n - l_i - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{i_s} - j_{s_a}^{ik} + 1)!}{(j_{i_s} + l_{i_s} - j_{i_s} - j_{s_a}^{ik})! \cdot (j_{ik} - j_s - j_{s_a}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{s_a}^{ik} - l_{ik} - s)!}{(j_{i_s} + l_i - j_i - l_{ik})! \cdot (j_i + j_{s_a}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^s \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)} \\
 & \sum_{j_{ik}=j_s+j_{s_a}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{s_a}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()}
 \end{aligned}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) =$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(l_i)} \sum_{(j_i=s)}^{(l_i)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(l_i + j_{sa}^{ik} - j_i - l_{ik})! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)} \sum_{i=1}^{(\cdot)} \sum_{i=s}^{(\cdot)} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=j_{ik}-l_{ik}-1)}^{(\cdot)} \sum_{n_s=j_{ik}+j_i-l_{k_2}}^{(\cdot)} \frac{(n_i + j_s + j_{sa}^{ik} - j_i - l_{ik} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \frac{(D - l_i)!}{(D - s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_s = -n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n$$

$$(D \geq l_i < n \wedge l = l_{k_1} + l_{k_2}) \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{l_{k_1}, l_{k_2}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = j_s + l_{k_1} \wedge$$

$$l_{k_2} = 2 \wedge l_{k_1} = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=s)}^{(l_i)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i+l_k}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - l_{k_2} - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_i - j_{ik})!}{(n_{ik} - j_{ik})! \cdot (n - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{()} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_i=s)}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}^{()} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$\sum_{k=1}^{(\cdot)} \sum_{j_s=1}^{(\cdot)} f_z^S j_s j_{ik} j_{sa}^{ik} \dots$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n-k_2-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_i - k - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - k - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

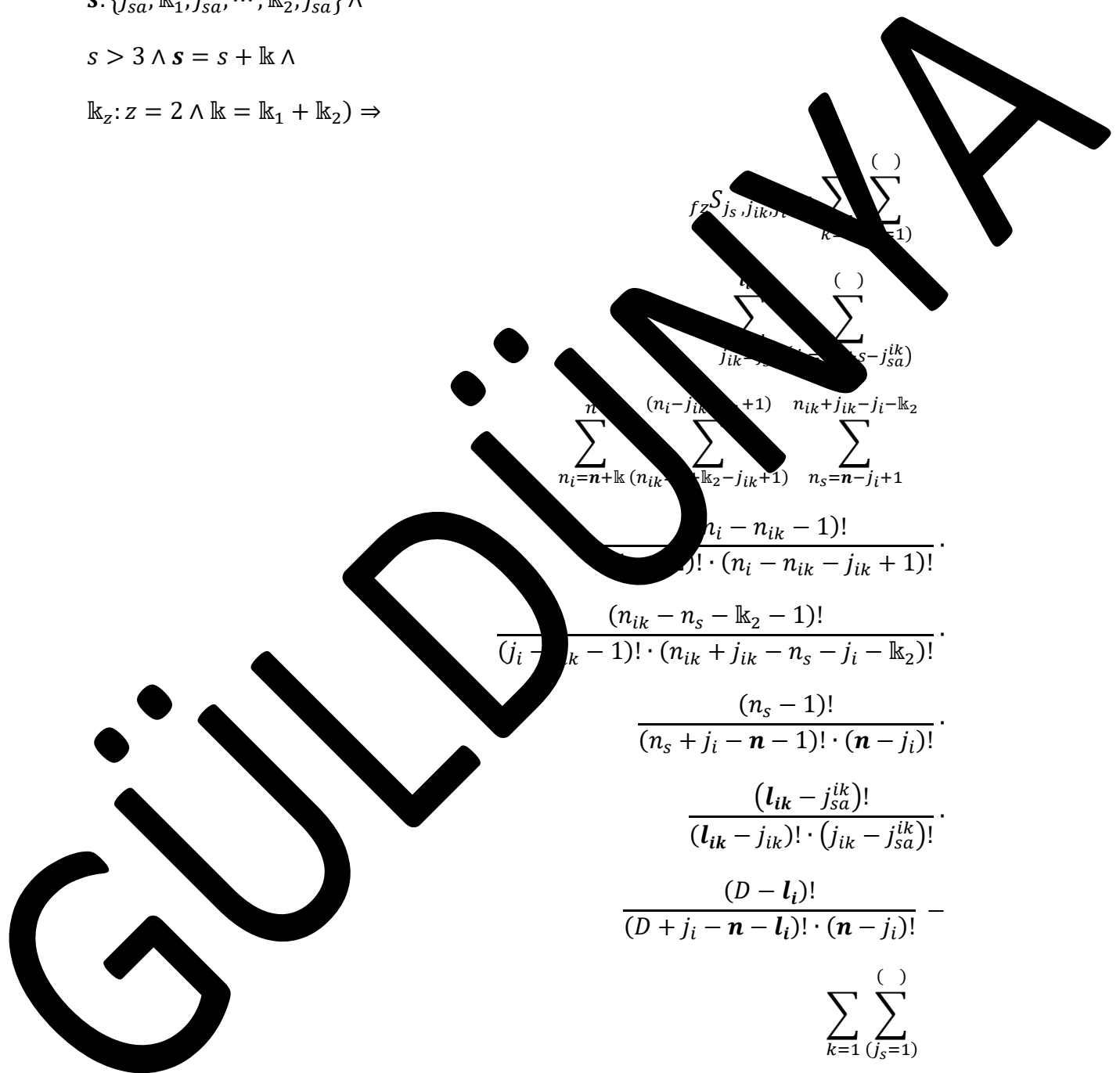
$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\cdot)} \sum_{j_s=1}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{j_i=s}^{(\cdot)}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s = 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i + s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$(D \geq n < n \wedge l_s = \mathbb{k} > 1 \wedge$$

$$j_{sa}^{ik} < j_i - 1 \wedge j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$j_{sa}^s \geq 3 \wedge j_{sa}^s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1} \sum_{\binom{()}{j_s=1}}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i+l_k}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - l_{k_2} - 1)! \cdot (n - j_i - l_{k_2})!} \cdot \\
 & \frac{(j_i - j_{ik})!}{(j_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(n_i + j_{sa}^{ik} - l_{k_1} - s)!}{(n_i + l_i - j_i - l_{k_1} - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{()} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j_i=s)}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}^{()} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$\begin{aligned}
 &= \sum_{j_i=j_{sa}^{ik}+1}^{(j_i+j_{sa}^{ik}-s)} \sum_{l_i=l_{ik}+s-j_{sa}^{ik}}^{(l_i+l_s-l_{ik})} \\
 &\sum_{j_{ik}=j_{sa}^{ik}+1}^n \sum_{(j_i=s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}
 \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=l_{ik}+j_s-j_{sa}^{ik}+1)}^{(l_i)}$$

$$\sum_{(n_{is}=n_{ik}+j_s-j_{ik}+1)}^{n_{ik}+j_s-j_{ik}+1} \sum_{(n_{ik}+j_{ik}-j_i-l_{ik})}^{(n_{ik}+j_{ik}-j_i-l_{ik})}$$

$$\frac{(n_{ik}+j_{ik}-j_i-l_{ik})!}{(n_{ik}+j_{ik}-j_i-l_{ik})! \cdot (n_{is}-j_s+1)!} \cdot \frac{(n_{is}-j_s+1)!}{(n_{is}-j_s+1)!} \cdot \frac{(n_{is}-j_s+1)!}{(n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-j_s+1)!}{(n_{is}-j_s+1)! \cdot (n_{is}-j_s+1)!} \cdot \frac{(n_{is}-j_s+1)!}{(n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-j_s+1)!}{(n_{is}-j_s+1)! \cdot (n_{is}-j_s+1)!} \cdot \frac{(n_{is}-j_s+1)!}{(n_{is}-j_s+1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-j_{sa}^{ik})} \sum_{(j_i=s+1)}^{()}$$

GÜLDÜZÜMÜŞ

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge$$

$$s = (j_{sa}^s, \mathbb{k}_1, j_{sa}^s, \mathbb{k}_2, j_{sa}^s) \wedge$$

$$s > 3 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z: z = \mathbb{k} \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=s+1)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_s - j_i - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - 2)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_{sa} - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{()} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{()} \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_i = l_s + s)}^{(l_i)} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
 \end{aligned}$$

GÜLDÜNKYA

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j_i+l_s-l_{ik}}^{(j_i+l_s-l_{ik})} \binom{(j_i+l_s-l_{ik})}{j_{ik}} \binom{(j_i+l_s-l_{ik})}{j_i+l_s-l_{ik}}$$

$$\sum_{j_{ik}=j_i+l_s-l_{ik}}^{(j_i+l_s-l_{ik})} \binom{(j_i+l_s-l_{ik})}{j_i+l_s-l_{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(n_s-n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$j_s > n - 1 \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{i=1}^{()} \sum_{j_s=j_{ik}-l_{ik}}^{()} \sum_{j_{ik}=j_{sa}^{ik}+l_{ik}}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{()} \sum_{n_i=n+l_{ik}-j_s+1}^{()} \sum_{n_{is}=n+l_{ik}-j_s+1}^{()} \sum_{n_{ik}=n+l_{ik}-j_s+1}^{()} \sum_{n_s=n-j_i+1}^{()} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

GÜLDÜMNYA

$$\sum_{k=1}^{\binom{D}{j_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{D}{j_s}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{ik}^s)}^{\binom{D}{j_i}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=l_k-j_s+1)}^{\binom{D}{n_i-j_s+1}}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{ik}}^{\binom{D}{n_{ik}}} \sum_{(n_{is}=n_{ik}+j_{ik}-j_{ik}^s)}^{\binom{D}{n_{is}}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(n_i - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s = D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{ik} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j_i \leq j_{ik} + j_{sa}^{ik} - 1 \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_i \wedge l_i + j_{sa}^{ik} - s > l_i \wedge$$

$$l_i \leq l_i + s - n \wedge$$

$$D \geq n \wedge l = l \wedge l = l_k > 1 \wedge$$

$$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, l_{k_2}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$$l_{k_2} > 3 \wedge l_{k_2} = s + l_{k_2} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{\binom{D}{j_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{D}{j_s}}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{ik}-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \sum_{k=1}^{\binom{()}{}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{()}{}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{\binom{()}{}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{\binom{()}{}}
 \end{aligned}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) =$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(j_s=2)} \\
& \sum_{k=j_s+l_{ik}-l_s}^{(k=j_s+l_{ik}-l_s)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(j_i=j_{ik}+s-j_{sa}^{ik})} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$\begin{aligned} f_{z=2}^{j_{sa}^{ik}, j_i} &= \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\ &\sum_{j_{ik}=j_{sa}^{ik}-l_s}^{(l_i)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)} \\ &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\ &\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_s+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\ &\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ &\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_{ik}+s-j_{sa}^{ik})}^{(n_{ik}+1)}$$

$$\sum_{n+l_{ik}}^n \sum_{(n_{is}=n_{ik}+1)}$$

$$\sum^{()}$$

$$\frac{(n_i + 2^{j_s + j_{sa}^{ik}} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2^{j_{sa}^{ik}} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i - j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < 1 \leq D + j_i + s - n - 1 \wedge$$

$$(D - n - n \wedge I = l_{k_1} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{ik_1}, j_{sa}^{ik_2}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + l_{k_1} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$\begin{aligned}
 f_{zS_{j_s, j_{ik}, j_i}} &= \sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)} \\
 &\sum_{j_{ik}=j_{s_a}^{ik}+1}^{j_i+j_{s_a}^{ik}-s} \sum_{(j_i=l_i+n-)}^{(l_{ik}+s-j_{s_a}^{ik})} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n+l_{k_2}-j_i+1}^{n_{is}+j_s-j_{ik}-} \sum_{(n_s=n-j_i+)}^{(n_i+j_{ik}-l_{k_2})} \\
 &\frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_i-n_{ik}-j_s+1)!} \\
 &\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \\
 &\frac{(n_{ik}-n_{k_2}-1)!}{(j_i-j_{k_2}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-l_{k_2})!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
 &\frac{(l_i+j_{s_a}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{s_a}^{ik}-j_{ik}-s)!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)} \\
 &\sum_{j_{ik}=j_{s_a}^{ik}+1}^{l_{ik}} \sum_{(j_i=l_{ik}+s-j_{s_a}^{ik}+1)}^{(n)} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_s - j_i - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{()} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{()} \\
 & \sum_{j_{ik} = j_i + j_{sa}^{ik} - s}^{(l_{ik} + s - j_{sa}^{ik})} \sum_{(j_i = l_i + n - D)}^{()} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}^{()} \sum_{(n_s = n_{ik} + j_{ik} - j_i - k_2)}^{()} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$\begin{aligned} f_{z^S} \mathcal{S}_{j_s, j_{ik}}^{j_i} &= \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)} \\ &\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(l_s+s-1)} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\ &\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{()} \sum_{j_s=j_{ik}-l_{ik}}^{()} \frac{()}{()} \cdot \\
 & \sum_{j_{ik}=l_{ik}+1}^{l_s+j_{sa}^{ik}} \sum_{(j_i=l_s+s)}^{()} \frac{()}{()} \cdot \\
 & \sum_{n_{ik}=l_{ik}+1}^{n_{ik}+l_k} \sum_{(n_{is}=n+l_k-j_s+1)}^{(j_s+1)} \frac{()}{()} \cdot \\
 & \sum_{n_{ik}=l_{ik}+1}^{n_{is}-j_{ik}-l_{k_1}} \sum_{(n_{ik}+j_{ik}-j_i-l_{k_2})}^{()} \frac{()}{()} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-1)} \sum_{(j_i=l_i+n-p)}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-1}^{()} \sum_{(n_{is}=n_{ik}+j_{ik}-j_i)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik})! \cdot (l_s - l_k - 2 \cdot j_{sa}^s)!}{(n_i - n - l_k - 1)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_i - 1)! \cdot (2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s = D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j_i \leq j_{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_i \wedge l_i + j_{sa}^{ik} - s > l_i \wedge$$

$$D + 1 - n < l_i \leq D - l_s + s - 1 \wedge$$

$$D \geq n \wedge I = l_k > 1 \wedge$$

$$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}^{ik}, \dots, l_{k_2}^i, j_{sa}^i\} \wedge$$

$$l_{k_2}^i > 3 \wedge s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(n)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-2)!(n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-k_2-1)!}{(j_i-j_{ik}-1)!(n_{ik}-j_{ik}-n_s-j_i-k_2)!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{(\cdot)} \\
 & \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_{ik}} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{(\cdot)} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{(\cdot)} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f_z S_{j_s, \dots, j_i} &= \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\ &\sum_{k=j_{sa}^{ik}+1}^{n+j_{sa}^{ik}-l_s-1} \sum_{(j_i=l_i+n-D)}^{(n)} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\ &\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\ &\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \end{aligned}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_s = j_{ik} + l_s - l_{ik})} \sum_{(j_i = j_{ik})}$$

$$(n_i - j_s + 1)$$

$$\sum_{(j_s = j_{ik} + l_s - l_{ik})} \sum_{(j_i = j_{ik})} \sum_{(n_i = n - j_s + 1)}$$

$$\sum_{(n_i = n - j_s + 1)} \sum_{(j_i = j_{ik})} \sum_{(n_{ik} = n - j_i + 1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

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$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_i)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}^{()} \sum_{(n_s=n_{ik}+j_i-j_{ik}-k_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^{ik})!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_s - 1$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - j_{ik} = l_{ik} \wedge$

$D + n < l_i \leq l_s + s - n - 1$

$(n \geq n < n \wedge k > 0)$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$

$\{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$

$s > 3 \wedge s = s$

$k_z \cdot z = z \wedge k = k_1 + k_2 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{()}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_s - l_{k_2} - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_s - 1)!}{(n_s - j_i - n - l_s - 1)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{i_k} - l_{i_k} - s)!}{(j_{i_k} + l_{i_k} - j_i - l_{i_k})! \cdot (j_i + j_{i_k} - j_{i_k} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^n \sum_{(j_s=l_i+n-D-s+1)}^{(l_{i_k}-j_{s_a}^{i_k}+1)} \\
 & \sum_{j_{i_k}=j_s+l_{i_k}-l_s}^n \sum_{(j_i=j_{i_k}+s-j_{s_a}^{i_k})}^{(n)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=0}^{\infty} \sum_{i_s=l_i+n-D-s+1}^{\infty} \sum_{i_k=j_s+l_{ik}-l_s}^{\infty} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{\infty} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(\quad)} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz^{S_{j_s, j_{ik}}} = \sum_{i=1}^{D-s} \sum_{(j_s=2)}^{(n)} \sum_{j_{ik}+l_{ik}-l_s}^{(n)} (j_i=l_i+n-D) \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

$$\sum_{k=1}^n \sum_{(n_{is}=n_{ik}+1)}^{(n_{ik}+1)}$$

$$\frac{(n_{is}+j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-l_{ik}-1)!}{(n_{ik}+l_{k2}-j_{ik}-1)! \cdot (n_{is}-j_i+1)!} \cdot \dots \cdot \frac{(n_{is}-1)!}{(n_{is}-2)! \cdot \dots \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(n_{is}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{is}-n_s-l_{k2}-1)!}{(j_i-l_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-l_{k2})!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_s \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge$$

$$s = (j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i) \wedge$$

$$s > 3 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z: z = \mathbb{k} \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=s+1)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik} - l_{k_2})!} \cdot \\
 & \frac{(n_s - n - 1)! \cdot (n - j_i)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - 2)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_i)} \sum_{(j_i=l_s+s)}^{(l_i)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}
 \end{aligned}$$

GÜLDENMYA

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 1)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i}^{(n)} \sum_{j_{sa}^{ik}=j_{ik}+1}^{(n)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i}^{(n)} \sum_{(j_i=s+1)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(n)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$n \geq n_s \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz S_{j_s}^{i_{ik} j_i} = \sum_{k=1}^{\binom{j_i - j_{sa}^{ik} + 1}{j_s}} \sum_{i_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik}} \sum_{i_i=l_{ik}}^{\binom{()}{j_i - l_{ik}}} \sum_{n_i=n+\mathbb{k}}^{\binom{(n_i - j_s + 1)}{(n_{is}=n+\mathbb{k}-j_s+1)}} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{\binom{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}{}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜNYA

$$\begin{aligned}
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik} (j_i=j_{ik}+l_i-l_i)}^{l_{ik}} \sum_{()}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{is}+j_s-j_{ik}}^{(n_{ik}+j_{ik}-i-l_{k_2})} \\
 & \sum_{n_{ik}=n+l_{k_2}-1}^{(n_s=n-j_i)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{ik} + j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - l_{k_2} - 1)!}{(j_i - l_{k_2} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDÜZÜM

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{(\cdot)}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$

$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > 3 \wedge s = s + 1 \wedge$

$\mathbb{k}: z = 2 \wedge \dots = \mathbb{k}_1 + \dots \Rightarrow$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{\binom{(\cdot)}{j_i=j_{ik}+l_i-l_{ik}}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^s = \sum_{k=1}^{j_{ik} - j_{sa}^{ik} + 1} \sum_{(j_s=2)}^{(l_s + s - 1)} \sum_{k=j_i + l_{ik} - l_i}^{(j_i = l_i + n - D)} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_i}^{(n)} \sum_{(j_s+s)}$$

$$(n_i - j_s +$$

$$\sum_{n+l_k} \sum_{n+l_k-j_s+1}$$

$$n_{is} - j_{ik} - k_1 \quad j_i - k_2$$

$$\sum_{n+l_k-j_s+1} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$(n_{is} - n_{ik} - 1)!$$

$$(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!$$

$$(n_{ik} - n_s - k_2 - 1)!$$

$$(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!$$

$$(n_s - 1)!$$

$$(n_s + j_i - n - 1)! \cdot (n - j_i)!$$

$$(l_s - 2)!$$

$$(l_s - j_s)! \cdot (j_s - 2)!$$

$$(l_{ik} - l_s - j_{sa}^{ik} + 1)!$$

$$(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!$$

$$(D - l_i)!$$

$$(D + j_i - n - l_i)! \cdot (n - j_i)! -$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_s+s-1)} \sum_{(j_i=l_i+n-D)}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{()} \sum_{(n_s=n_{ik}+j_s-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - 2 \cdot j_s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - 2 \cdot j_s)!} \cdot \frac{(l_s - 2)!}{(l_s - 2)! \cdot (j_s - 2)!} \cdot \frac{(D - j_s - n - l_i)! \cdot (n - j_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 < j_{ik} \leq j_s + j_{sa}^{ik} - s$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - 1 = l_{ik} \wedge$

$D + j_{ik} - n < l_{ik} \wedge D + l_s + j_{sa}^{ik} - 1 = l_{ik} - 1$

$(D \geq n < n) \wedge l_k > 1$

$j_{sa}^{ik} - j_{sa}^i - 1 \wedge j_{sa}^s - j_{sa}^{ik} - 1$

$s \in \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$

$s > 3 \wedge s = j_{sa}^{ik} \wedge$

$l_{k_2} = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$

$$f_z^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!}$$

$$\frac{(n_s - j_i - n - l_i - j_i)!}{(l_s - 2)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_{ik} + l_{ik} - j_{sa}^{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_i + 1)!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_s=1}^{l_s} \sum_{j_{ik}=j_s}^{j_{ik}^{ik}+1} \\
& \sum_{j_{sa}^{ik}=1}^{l_s - j_{sa}^{ik} - 1} \sum_{j_i=n+j_{sa}^{ik}-D-s}^{()} (j_i=j_{ik}+l_i-l_{ik}) \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}} = \sum_{i=1}^{D-s} \sum_{(j_s=2)}^{(n)} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(n)} \sum_{(n_i=n+\mathbb{k})}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{(n+l_k)}^{(n+l_k)} \sum_{(n_{is}=n_{is}+1)}^{(n_{is}+1)}$$

$$\sum_{(n_{ik}+l_{k2}-j_{ik})}^{(n_{ik}+j_{ik}-j_i-l_{k2})} \sum_{(j_i=j_i+1)}$$

$$\frac{(n_{is}+j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-l_{k2})!}{(n_{is}-1)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{ik}-n_{ik}-1)!}{(n_{is}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_s-l_{k2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-l_{k2})!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_s \wedge$$

$$D + s - n < l_i \leq D + l_s - n - 1 \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge$$

$$s \in (j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}) \wedge$$

$$s > 3 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik} - k_2)!} \cdot \\
& \frac{(n_s - j_i - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(j_s - 1)!}{(j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
& \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(n)} \sum_{(j_i=l_s+s)}^{(n)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}
\end{aligned}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_{sa}^{ik} = 1}^{(j_{ik} - j_s - 1)} \sum_{j_{sa}^{ik} = 1}^{(l_s + j_{sa} - 1)} \sum_{j_{ik} = j_{sa}^{ik} - l_{sa} \ (j_{sa}^{ik} = l_i + n + j_{sa} - D - s)} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{(j_{ik} - j_s - 1)} \cdot \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$n \geq n_s \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$\begin{aligned}
 & \sum_{k=1} \sum_{(j_s=2)}^{(l_s)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-1}^{n_{is}+j_s-j_{ik}} \sum_{(n_s=n-j_i+l_{ik}-k_2)}^{(n_i+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{ik} - k_2 - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_{ik} - n_s - j_i - k_2)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_2 \cdot z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{is}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(l_s - j_s - 1)! \cdot (l_s - j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^k + 1)!}{(j_s + l_{ik} - j_{sa}^k - 1)! \cdot (j_{ik} - j_{sa}^k - j_{sa}^k + 1)!} \cdot \\
 & \frac{(D - l_s - j_{sa}^k)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^k+1)}^{(l_s)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^k-1}^{n+j_{sa}^k-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i - l_i)!} \cdot \sum_{k=1}^{(l_s)} \sum_{j_s=l_i+n-l_s+1}^{(l_s)} \sum_{j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j_i+j_{sa}^{ik}-s} \sum_{j_s+1}^{(j_s+1)} \sum_{n_i+l_k \leq n_i+l_k-j_s+1} \sum_{j_s=n_i+j_{sa}^{ik}-l_k-1}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-l_k} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S_{j_s j_{ik} j_i} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_i+\mathbb{k}}^{(\cdot)} \sum_{(j_i=s)}^{(\cdot)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_s=n-j_i-\mathbb{k}_2)}^{(n_{ik}+j_i-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n - \mathbb{k}_1 - 1)!}{(j_{ik} - \mathbb{k}_1 - 1)! \cdot (n_i - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_i - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\cdot)} \sum_{(j_i=s)}^{(\cdot)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\cdot)} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

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$$D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$f_{z^j} = \sum_{k=1}^{\binom{()}{j_s}} \sum_{(j_s=1)}^{\binom{()}{j_i}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{\binom{()}{j_i}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\cdot)} \sum_{(j_i=s)}^{(\cdot)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{(\cdot)} \sum_{n_s=n_{ik}}^{(\cdot)} \sum_{(j_i-j_i-k_2)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - l_i)! \cdot (2 \cdot j_s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - l_i)! \cdot (j_{sa}^s)!}$$

$$\frac{(n_i - n - k_1 - k_2 - l_i)!}{(n_i - n - k_1 - k_2 - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_s, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\frac{\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(j_s - 2)!}$$

$$\frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(n)} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-k_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f^{z,j_{sa}^{ik},j_i} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz \mathcal{S}_{j_s, j_{ik}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(n)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+1}^n \sum_{(n_i+j_s+1)}^{(n)}$$

$$\sum_{i_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{ik}+j_{ik}-j_{sa}^{ik})}^{(n)}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} + j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - j_s - \mathbb{k}_2 - 1)!}{(j_{ik} + j_s - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(n)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

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$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - j_i - n - j_i)!}{(n_s - j_i - n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_s - l_{ik} - s)!}{(j_{ik} + l_{ik} - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{\binom{()}{j_i=j_{ik}+s-j_{sa}^{ik}}} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{\binom{()}{j_i=j_{ik}+s-j_{sa}^{ik}}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}
 \end{aligned}$$

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$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$S_{i,j_i} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-s-1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^s (j_s = j_{ik} - j_{sa}^{ik})$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$\sum_{k=1}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n-l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(\)} \sum_{(n_{ik}+j_{ik}-j_i=l_{k_2})}^{(\)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq j_{sa}^{ik} + j_{sa}^{ik} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = n - l_i + j_{sa}^{ik} - s > l_{k_2} \wedge$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^k < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^i - l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = j_{sa}^i + l_{k_1} \wedge$$

$$l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(\)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=l_i+n-D)}^{(n)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_{ik}-n_{ik}-k_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-k_2)!} \cdot \\
 & \frac{(n-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - l_i - s)! \cdot (j_i + j_{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)} \cdot \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n-s+1)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n-s+1)} \cdot \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \cdot \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n-s+1)} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(n-s+1)} \cdot \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$\begin{aligned} & \sum_{i=1}^{(l_i+n-D)} \sum_{j_s=n-D}^{(l_i+n-D)} \\ & \sum_{j_{ik}=j_s+j_{sa}^i-1}^{(n)} \sum_{(j_i=l_i+n-D)}^{(n)} \\ & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\ & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\ & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\ & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

$$\sum_{i=n+l_k}^n \sum_{(n_{is}=n_{is}+1)}^{(n_{is}+1)}$$

$$\frac{(n_{is}+j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-l_{ik}-1)!}{(n_{is}+l_k-1)! \cdot (n_{is}-j_s+1)!} \cdot$$

$$\frac{(n_{is}-l_{ik}-l_k-1)!}{(j_{ik}-l_{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_k)!} \cdot$$

$$\frac{(n_{is}-n_s-l_k-1)!}{(j_i-l_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-l_k)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot$$

$$\frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_s \wedge$

$(D \geq n < n \wedge l = \mathbb{k} > 0$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$

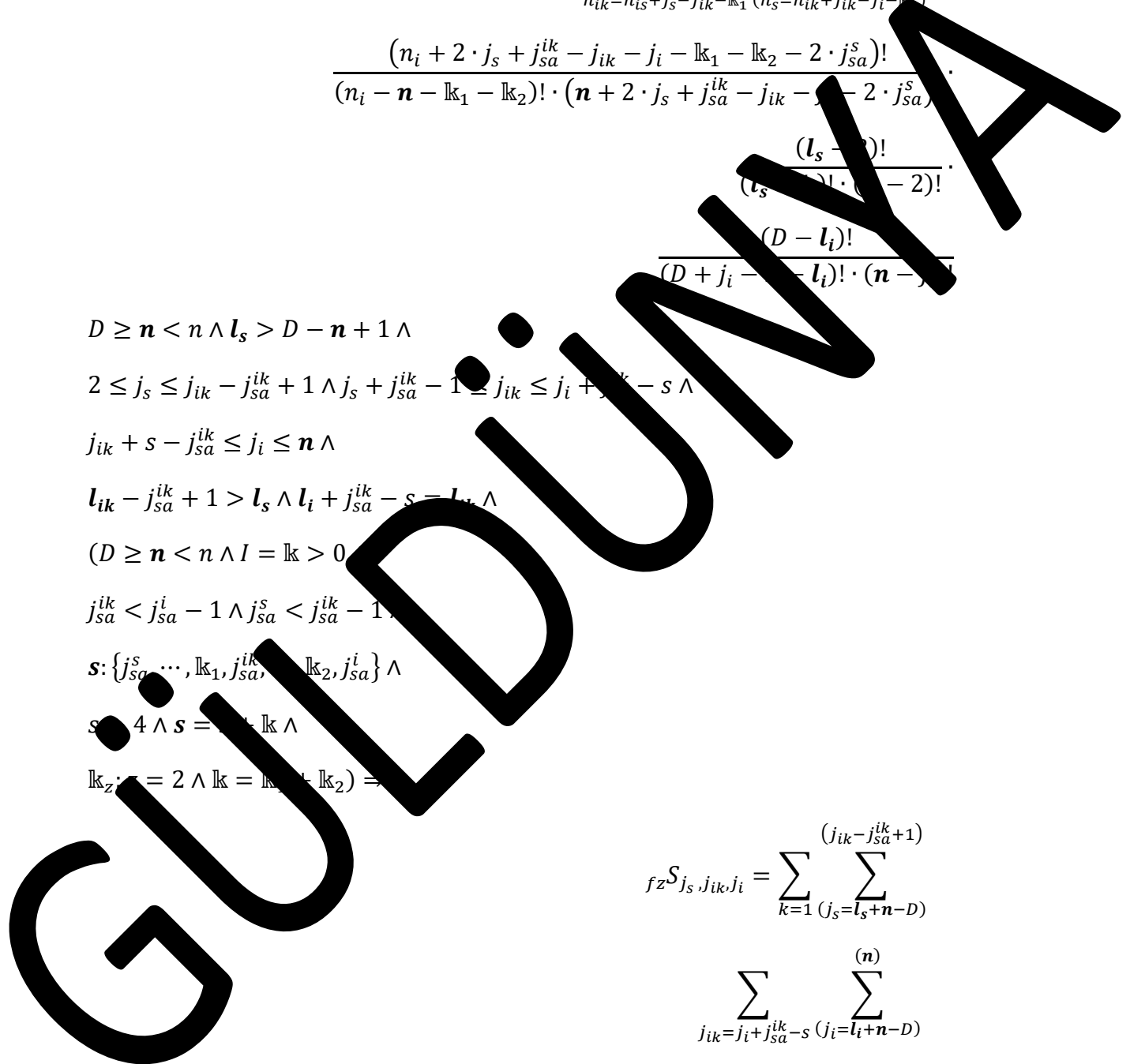
$s \cdot 4 \wedge s = \dots + \mathbb{k} \wedge$

$\mathbb{k}_z: \dots = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$



$$\frac{\sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(n)} \sum_{(j_i=l_i+\mathbf{n}-D)}^{(n)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\mathbf{n} + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z = j_{ik}, j_i = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + n - D)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{k - s} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{()}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{j_s=j_{ik}+j_{sa}^{ik}+1}$$

$$\sum_{j_{sa}^{ik}=n+j_{sa}^{ik}-D-j_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=0}^n \sum_{l_k} (n_{is}=n+l_k-j_s+1)$$

$$\sum_{n_s=n_{ik}+j_{ik}-j_i-l_k_2}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n_{ik} - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - j_s + 1 \wedge$$

$$2 \leq j_s < j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$j_{sa}^{ik} - 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$s > 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\frac{(n_{i_s} + \mathbb{k} (n_{i_s} + n + \mathbb{k} - j_s - 1))!}{(j_s - 2)! \cdot (n_{i_s} - n_{i_s} - j_s + 1)!}$$

$$\frac{(n_{i_s} - n_{i_s} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - \mathbb{k} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

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$$\frac{\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})} \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - l_{k_1})!} \cdot \frac{(n_{i_k} - n_s - l_{k_2} - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i - l_{k_2})!} \cdot \frac{(n - j_i - 1)!}{(n_s - j_i - n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{i_k} - j_{i_k} - j_{s_a}^{i_k} + 1)!}{(l_{i_k} + l_{k_1} - j_{i_k} - j_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^n \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{i_k}=j_s+j_{s_a}^{i_k}-1} \sum_{(j_i=j_{i_k}+s-j_{s_a}^{i_k})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n_{i_k}+j_{i_k}-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{s_a}^{i_k} - j_{i_k} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{s_a}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{s_a}^{i_k} - j_{i_k} - j_i - 2 \cdot j_{s_a}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$\sum_{k=1}^{j_{ik} - j_{sa}^{ik} + 1} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = j_i + j_{sa}^{ik} - s} \sum_{(j_i = l_{ik} + n + s - D - j_{sa}^{ik})}^{(n)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(n)} (j_s = j_{ik} - j_{sa}^{ik})$$

$$\sum_{k=1}^{(n)} (j_{ik} = j_i + j_{sa}^{ik} - s) \wedge (j_i = l_{ik} + n + s - D - j_{sa}^{ik})$$

$$\sum_{k_1=1}^{(n_i - j_s + 1)} \sum_{k_2=1}^{(n_i - j_s + 1)} (n_i = n + k_1) \wedge (n_{is} = n + k_1 - j_s + 1)$$

$$\sum_{k_1=1}^{(n_i - j_s + 1)} \sum_{k_2=1}^{(n_i - j_s + 1)} (n_{ik} = n_{is} + j_s - j_{ik} - k_1) \wedge (n_s = n_{ik} + j_{ik} - j_i - k_2)$$

$$\frac{(n_i + n_{is} + j_s - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-1)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n}^{n+j_{sa}^{ik}-s} \sum_{(j_{ik}-j_{sa}^{ik})}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{(n+l_s)}^{(n+l_s)} \sum_{(n+l_s-j_s+1)}^{(n+l_s-j_s+1)}$$

$$\sum_{(n+l_s-j_{ik}-k_1)}^{(n+l_s-j_{ik}-k_1)} \sum_{(n+l_s-j_{ik}-k_2)}^{(n+l_s-j_{ik}-k_2)}$$

$$\sum_{(n+l_s-j_{ik}-k_1-k_2)}^{(n+l_s-j_{ik}-k_1-k_2)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

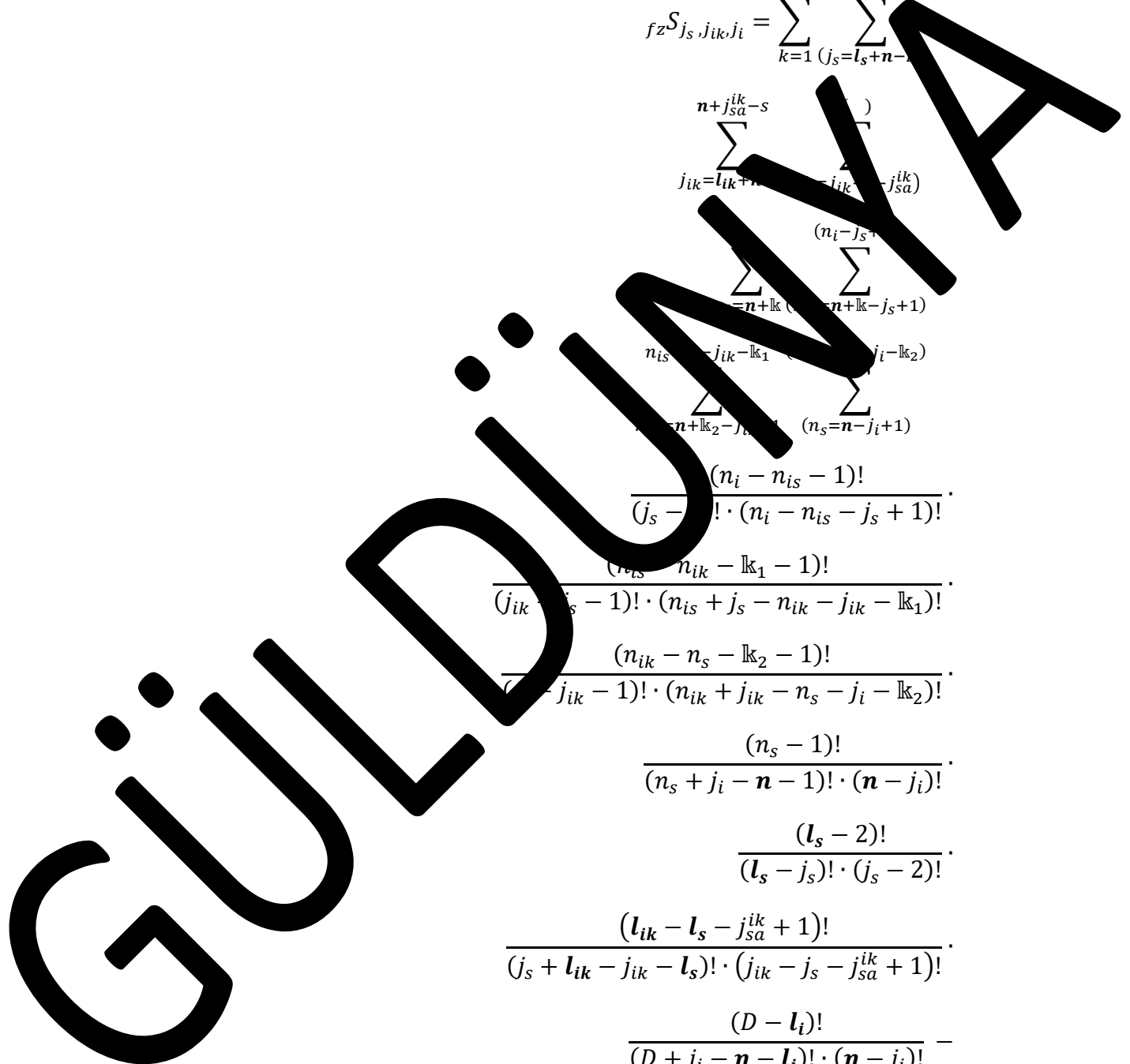
$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$



$$\sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_i)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{()} \sum_{(n_s=n_{ik}+j_i-j_{i_2})}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^i)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_s - j_{ik} - j_i - j_{sa}^i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j_{ik} - j_{sa}^{ik} - s$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^i < j_{sa}^i - 1 \wedge j_{sa}^i < j_{sa}^i - 1 \wedge$$

$$s: \{ \dots, l_{k_1}, j_{sa}^{ik}, \dots, j_{sa}^i \} \wedge$$

$$s > 4 \wedge s > s + l_k \wedge$$

$$l_{k_2}: z > 2 \wedge l_{k_2} > l_{k_2} \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\frac{\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - 1 - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_{ik} + l_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^s \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(n-s+1)} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\quad)} \frac{\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - 1 - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_{ik} + l_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!}$$

$$\frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^j \sum_{l_{ik}+n-D-j_{sa}^{ik}+1}$$

$$\sum_{l_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$fz S_{j_s, j_i, j_i} = \sum_{k=1}^{(j_i - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s - D)}^{(n)}$$

$$\sum_{j_{ik} = l_{ik} + 1}^{j_i + j_{sa}^{ik}} \sum_{(n - D)}^{(n)}$$

$$\sum_{n_i = n + k}^{(n_i - j_s + 1)} \sum_{(n_i = n + k - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(l_i=n-D)}$$

$$\sum_{n+l_k}^{(n_i+l_k+1)} \sum_{(n_i=n+l_k+1)}$$

$$\sum_{(n_{ik}=n_{is}+l_{ik}-l_{k_1})} \sum_{(j_i=l_{k_2})}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > n - n + 1 \wedge$$

$$2 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i - j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n - l = l_k) \wedge$$

$$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 1 \wedge s = s + l_k \wedge$$

$$l_{k_z}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(n)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_2}-1)!}{(j_{ik}-j_s-1)!(j_s-n_{is}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{ik}-l_{k_2}-1)!}{(j_i-j_{ik}-1)!(n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!} \cdot \\
 & \frac{(n_i-1)!}{(n_s)!(j_i-n-1)!(n-j_i)!} \cdot \\
 & \frac{(l_s-2)!}{(l_s-j_s)!(j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_{ik}-l_{ik}-j_{ik}-l_s)!(j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})!(j_i+j_{sa}^{ik}-j_{ik}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)!(n-j_i)!} \\
 & \sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{(\cdot)}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = (\mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)} \sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(n)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s) \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s) \cdot (j_{ik} - j_s - j_s + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_{ik} - l_i) \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - l_i) \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
\end{aligned}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{(n-s)} \sum_{j_s=l_i+n-D-s+k}^{(n-s-k)} \sum_{j_{ik}=j_i+j_{sa}^{ik}-1}^{(j_i+j_{sa}^{ik}-1)} \sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{(n_s=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}^{(n_s=n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i + j_{ik} + j_{sa}^s - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)}$$

$$\sum_{j_{ik}=l_{ik}}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=n-D)}^{(n)}$$

$$\sum_{n_i=n+k_1}^{n} \sum_{(n_i=j_s)}^{(n_i-j_s)}$$

$$\sum_{n_{ik}=n-j_{ik}-k_2}^{n} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{ik} - k_1 - 1)!}{(j_{ik} + j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_{ik} + j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)}$$

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$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+l_1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+l_1-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 1)! \cdot (2 \cdot j_s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - j_s - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik} - j_{sa}^{ik} < j_{ik} \leq j_s + j_{sa}^{ik} - s$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - j_{ik} = l_{ik} \wedge$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_s < j_{sa}^{ik} - 1 \wedge j_s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{ \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^{ik} \}$$

$$j_s > 4 \wedge j_s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + (j_s - 2) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\frac{\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n - j_i - 1)!}{(n_s - j_i - n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{ik} - l_{ik} - s)!}{(j_{ik} + l_{ik} - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{\binom{()}{j_s=j_{ik}+l_s-l_{ik}}}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{\binom{(n)}{}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{\binom{()}{}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

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$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$S_{i, k}^{j_i} = \sum_{k=1}^{j_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{j_s} \sum_{j_s = j_{ik} + l_s - k}^{(n)} \sum_{j_{ik} = l_i + k}^{j_{ik} - D - s} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{(n)} \\
& \sum_{n_i = n + k}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_s - j_{ik} - k_1} \sum_{(n_{ik} + j_{ik} - j_i - k_2)}^{(n_s - n - j_i + 1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n-k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{ik}} \sum_{(n_{ik}+j_{ik}-j_i)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = n - l_i \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge l_s > D - n \wedge$$

$$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^s - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s > s + k \wedge$$

$$z = 2 \wedge k = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-s-1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(n)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_1)} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)!(n_i-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-k_2-1)!}{(j_i-j_{ik}-1)!(n_{ik}+j_{ik}-n_s-j_i-k_2)!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{\binom{()}{j_s=j_{ik}+l_s-l_{ik}}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{n+j_{sa}^{ik}-s} \sum_{(n)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - l_i - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{()} \sum_{(j_s = j_{ik} + l_s - l_{ik})} \\
 & \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{n + j_{sa}^{ik} - s} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{()} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{()} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$\begin{aligned}
 & f_z S_{j_s} \sum_{k=1}^{(l_i+n-D-s)} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} (j_i - j_{sa}^{ik} + 1) \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}
 \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

$$\sum_{k=1}^n \sum_{(n_{is}=n-l_{ik}+1)}^{(n_{is}+1)}$$

$$\frac{(n_{is}+j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-l_{ik}-1)!}{(n_{is}-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-l_{ik}-k_1-1)!}{(j_{ik}-l_{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!}$$

$$\frac{(n_{is}-n_s-k_2-1)!}{(j_i-l_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k_2)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{iS}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{iS}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$

$(D \geq n < n \wedge l = \mathbb{k} > 0$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s \cdot 4 \wedge s = \dots + \mathbb{k} \wedge$

$\mathbb{k}_z: \dots = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{iS}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - 2)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + \mathbf{n} - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}
 \end{aligned}$$

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$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{(n-s+1)} \sum_{l=0}^{D-s+1} \binom{()}{=} \sum_{j_s+l_{ik}-s}^{(n-s+1)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$\geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{(j_{ik}+l_{ik}-l_i)}^{(j_{ik}+l_{ik}-l_i)} \sum_{(j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+l_{ik}}^{n_i=n+l_{ik}} \sum_{(j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{is}=j_s-j_{ik}-\mathbb{k}_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\sum_{n_{ik}=j_{ik}-j_i-\mathbb{k}_2+1}^{n_{ik}=j_{ik}-j_i-\mathbb{k}_2+1} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_s-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - 2 \cdot j_s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - 2 \cdot j_s)!} \cdot \frac{(l_s - 2)!}{(l_s - 2)! \cdot (j_s - 2)!} \cdot \frac{(D - j_s - n - l_i)! \cdot (n - j_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 < j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - 1 = l_{ik} \wedge$

$(D \geq n < n \wedge l_s > 0 \wedge$

$j_s < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$

$s: \{ \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i \}$

$s > 4 \wedge s = s + l_k \wedge$

$l_{k_2}: z = 2 \wedge l_{k_1} = l_{k_2} - 2 \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} + l_{k_1} - j_{sa}^{ik} - j_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{\binom{()}{j_i=j_{ik}+l_i-l_{ik}}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}
 \end{aligned}$$

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$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$f_{z=2}^{s, j_{ik}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{j_s=l_i+n-D-j_i}^{(n-s)} \sum_{j_{ik}=j_s+l_i-l_{ik}}^{(j_{ik}+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+l_i-l_{ik}}^{(j_i)} \\
 & \sum_{n_i=n+l_k}^{(n_i-j_s+1)} \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n-s-j_{ik}-l_k} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_k)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_i=j_{ik}+l_i-l_s)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-1}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - k_1 - k_2 + 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - k_1 - k_2 + 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n - 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - s \wedge$

$j_{ik} + j_{sa}^{ik} \leq j_i \leq j_{sa}^{ik} \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \leq l_i \wedge l_i + j_{sa}^{ik} - s = l_s \wedge$

$(D - n < n \wedge I = k_1 + k_2 = 0 \wedge$

$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^s - 1 \wedge$

$s: \{j_s^s, \dots, k_1, j_s^s, \dots, 2, j_{sa}^i\} \wedge$

$s > 4 \wedge s = s + k \wedge$

$k; z = 2, k = k_1 + k_2 \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(n)}^{(n)} \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-n_{ik}-j_{ik}-l_{k_1})!} \cdot \frac{(n_{ik}-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!} \cdot \frac{(n_i-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_{ik}-l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(n)}^{(n)} \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n)}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2)$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = l_{ik} + n - D}^{n + j_{sa}^{ik} - s} \sum_{(j_i = j_{ik} + l_i - l_{ik})}^{()}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{(j_{ik} - j_s - j_{sa}^{ik} + 1)} \sum_{n_{ik} = l_{ik} + n - D}^{n - \mathbb{k}_2 - s} \sum_{n_i = n + \mathbb{k}_1}^n \sum_{n_{is} = n + \mathbb{k}_1 - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2}^{(n_s - j_s + 1)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - j_s - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$n \geq l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{(j_s = l_s, n-D)}^{(l_s = n-D - j_{sa}^{ik})} \sum_{(j_{ik} = l_{ik} - s)}^{(l_{ik} = n - j_{sa}^{ik} - s)} \sum_{(j_i = l_i + n - j_{sa}^{ik} - s)}^{(l_i = n - j_{sa}^{ik} - s)} \sum_{(n_{is} = l_{is} + \mathbb{k} - j_s + 1)}^{(l_{is} = n + \mathbb{k} - j_s + 1)} \sum_{(n_{ik} = l_{ik} - \mathbb{k}_2 - j_{ik} + 1)}^{(l_{ik} = n - j_{ik} + 1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$n_{is}+j_s-j_{ik}-l_{k_1}+j_{ik}-l_{k_2}$$

$$n_{ik}=n+l_{k_2}-j_{ik}-1 \quad (n_s=n-j_i+1)$$

$$\frac{(n_s-n_{ik}-1)!}{(j_s-2)! \cdot (n_{ik}-j_s+1)!}$$

$$\frac{(n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!}$$

$$\frac{(n_{ik}-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{is}+j_{ik}-n_s-j_i-l_{k_2})!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{()} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$

$l_i \leq D + s - n \wedge$

$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

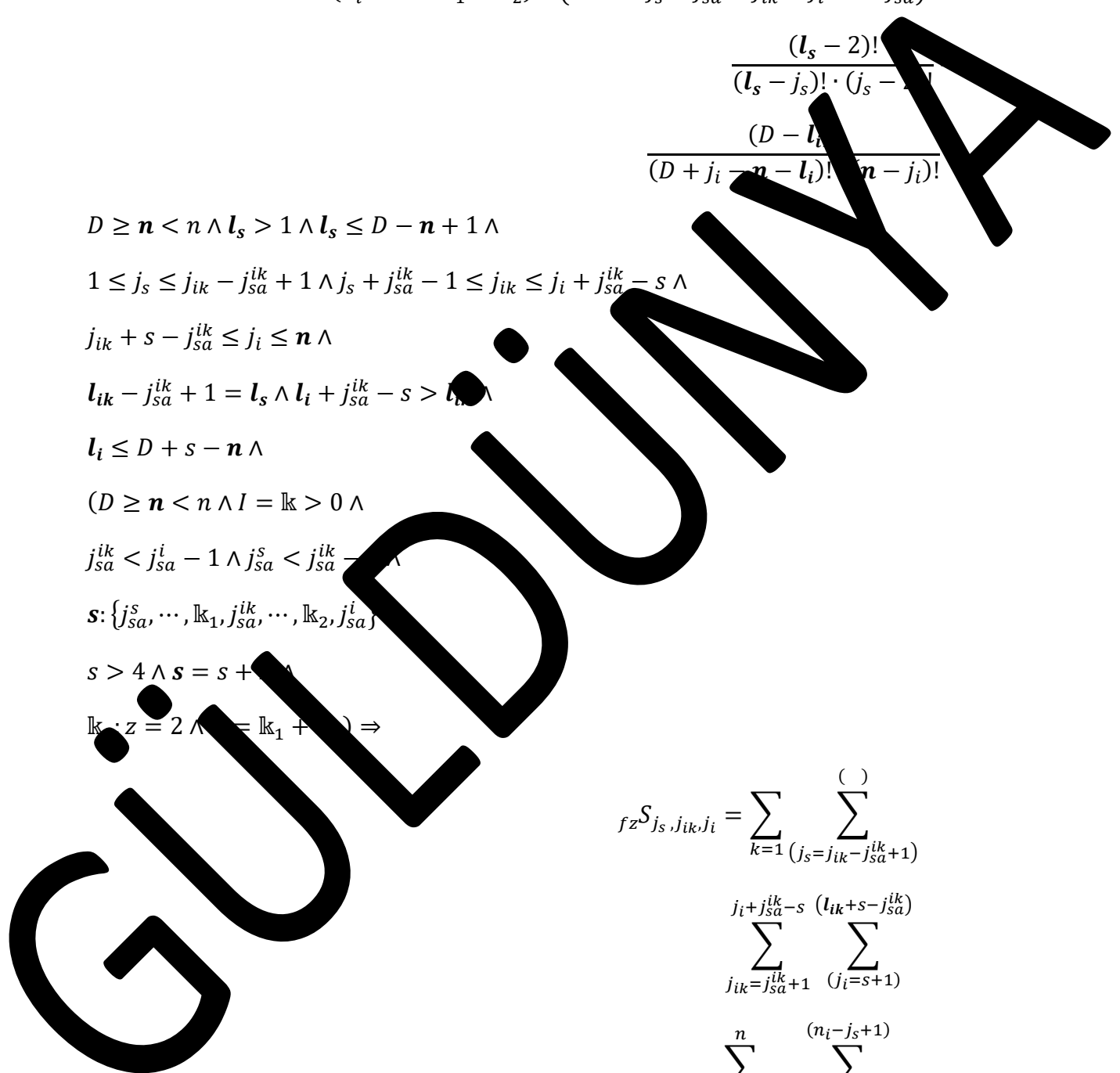
$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\}$

$s > 4 \wedge s = s + 1 \wedge$

$\mathbb{k}_z = 2 \wedge (\mathbb{k}_z = \mathbb{k}_1 + \dots) \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=s+1)}^{(l_{ik}+s-j_{sa}^{ik})} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$



$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(l_s - j_s - 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{l_{ik}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{()} \\
& \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik}} \sum_{(j_i = l_{ik} + s - j_{sa}^{ik} + 1)}^{(l_i)} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{j_s=j_{ik}+1}^{()} (j_s=j_{ik}+1)$$

$$\sum_{j_{ik}=j_i+j_s}^{()} \sum_{(j_i=s+1)}^{()} (j_i=s+1)$$

$$\sum_{n_i=1}^n \sum_{k} (n_{is}=n+k-j_s+1)$$

$$\sum_{n_{is}=j_i+k-k_1}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-k_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n_{ik} - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_i < j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_s \leq j_i \leq n \wedge$$

$$j_{ik} - 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \frac{\sum_{j_i+j_{sa}^{ik}-(l_s+s-1)}^{(\quad)} \sum_{j_{ik}-j_{sa}^{ik}+1}^{(\quad)} \sum_{(n_s=s+1)}^{(\quad)} \sum_{(n_i-j_s)}^{(\quad)} \sum_{(n+n_k)}^{(\quad)} \sum_{(n+n_k-j_s+1)}^{(\quad)} \sum_{(n_{is}=j_{ik}-k_1)}^{(\quad)} \sum_{(j_i-k_2)}^{(\quad)} \sum_{(n+n_k-j_{ik}-1)}^{(\quad)} \sum_{(n_s=n-j_i+1)}^{(\quad)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=l_s+s)}^{(l_i)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_1})}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!} \cdot \\
 & \frac{(n_s-j_i-n-1)! \cdot (n-j_i)!}{(n_s-j_i-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=1}^{\binom{()}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{()}{}} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-1)} \sum_{(j_i=s+1)}^{\binom{()}{}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{\binom{()}{}}
 \end{aligned}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) =$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_s=1}^{l_{ik}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(j_s=j_{ik}+s-j_{sa}^{ik})} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(j_i=j_{ik}+s-j_{sa}^{ik})} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{(j_s)} \sum_{j_{ik}=j_{ik}+1}^{(j_{ik})} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(j_i)} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

GÜLDÜNYA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}-s-j_{sa}^{ik})}^{(\)}$$

$$\sum_{n+l_k}^{n+l_k+l_k-1} \sum_{(n_i=n+l_k+l_k-1)}^{(n_i+l_k+1)}$$

$$\sum_{(j_i=j_{ik}-l_k)}^{(\)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - l_k - l_k - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 0 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge l_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} - s - j_{sa}^{ik} \leq j_i - s \wedge$$

$$l_k - j_{sa}^{ik} - 1 = l_s \wedge l_i - j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - 1 \wedge$$

$$(D \geq n - 1 \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$l_{k_2}: z = 2 \wedge k = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz^{\mathcal{S}}_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(l_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j_s + j_{sa}^{ik} - 1}^{(l_i)} \sum_{(j_i=j_{ik} + s - j_{sa}^{ik})}^{(l_i)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$n_{is} + j_s - j_{ik} = n + k - j_s + 1 + j_{ik} - j_i - k_2$$

$$n_{ik}=n+k_2-j_{ik}+1 \quad (n_s=n-j_i+1)$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{ik} - k_2 - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(l_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j_s + j_{sa}^{ik} - 1}^{(l_i)} \sum_{(j_i=j_{ik} + s - j_{sa}^{ik})}^{(l_i)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜZ

YAYIN

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{(\cdot)}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - j_i)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\}$$

$$s > 4 \wedge s = s + 1 \wedge$$

$$\mathbb{k} : z = 2 \wedge \dots = \mathbb{k}_1 + \dots \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - s)! \cdot (j_i + j_{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz S_{j_s, \dots, j_i} = \sum_{k=1}^{()} (j_s = j_{ik} - j_{sa}^{ik} + 1)$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_s-s} \sum_{(j_i=l_i+n-D)}^{(l_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik}} \sum_{(j_i = j_{ik} + 1)}$$

$$(n_i - j_s + 1)$$

$$\sum_{(j_s = j_{ik} + l_{k_1} - j_s + 1)}$$

$$\sum_{(n_{is} + j_{ik} - l_{k_1} - (n_{ik} + j_{ik} - l_{k_2}))}$$

$$\sum_{(n_{ik} + l_{k_2} - j_{ik})} \sum_{(n_s = n - j_i + 1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

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$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(l_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_i)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_i-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_i \wedge j_{sa}^{ik} - s$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - j_{ik} = l_{ik} \wedge$

$D + n < l_i \leq D - l_{ik} + s - n - j_{sa}^{ik} \wedge$

$(n \geq n < n \wedge \mathbb{k} = \mathbb{k} > 0)$

$j_{sa}^{ik} - j_{sa}^i - 1 \wedge j_{sa}^s - j_{sa}^{ik} - 1$

$\{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2 - j_{sa}^i\} \wedge$

$s > 4 \wedge s = s$

$\mathbb{k}_z \cdot z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(l_s+s-1)}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_s - 1)!}{(n_s - j_i - n - l_s - 1 - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{ik} - l_{ik} - s)!}{(j_{ik} + l_{ik} - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{\binom{D}{j_s}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{D}{j_s}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=l_s+s)}^{\binom{n}{j_i}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - j_i - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - s)!}$$

$$\frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_s=1}^{j_{ik} - j_{sa}^{ik} + 1}$$

$$\sum_{j_{ik}=j_i + j_{sa}^{ik} - s}^{(l_s + s - 1)} \sum_{(j_i = l_i + n - D)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^n \sum_{j_i=l_i+n-D}^{n+j_{sa}^i-1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{n_i-j_s+1} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_{ik}-k_1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_{is}+1)}$$

$$\sum_{n_{ik}+l_{k_2}-j_{ik}}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(j_i=j_{ik}+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!}$$

$$\frac{(n_{ik}-n_s-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-l_{k_2})!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}$$

$$D + s - n < l_i \leq D + l_{ik} - s - n - j_{sa}^{ik}$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2, \dots, j_i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z: z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - 2)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{sa}^{ik}=1}^{(j_i - j_{ik} - s)}$$

$$\sum_{j_{ik}=l_i}^{l_s + j_{sa}^{ik} - 1} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(j_i - j_{ik} - s)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - l_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$l_s \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$\begin{aligned}
 & f_z^s j_s j_{ik} j_i \sum_{k=1}^{(n-D-s)} \sum_{j_i=1}^{(n-D-s)} \sum_{j_{ik}=j_s+1}^{(n-D-s)} \sum_{j_{is}=1}^{(n)} \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \sum_{(n_s=n-j_i+1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{(l_i - j_{sa}^{ik} + 1)} \sum_{(j_s = l_i + n - D - s + 1)} \\
 & \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(n)} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{(n_i + j_s - j_{ik} - k_1 + j_{sa}^{ik} - k_2)} \sum_{(n_s = n - j_i + k_1 - k_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{ik} - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_i + n - D - s + 1)} \\
 & \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(\quad)} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{(\cdot)}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$

$D + s - n < l_i \leq D + l_{ik} + s - n - j_s \wedge$

$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\}$

$s > 4 \wedge s = s + 1 \wedge$

$\mathbb{k}: z = 2 \wedge (\mathbb{k} = \mathbb{k}_1 + \dots) \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(l_s - j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_s)} \binom{l_s}{j_s = l_i + n - s + 1}$$

$$\binom{j_{ik} = j_s + j_{sa}^{ik}}{j_i = j_{ik} + s - j_{sa}^{ik}}$$

$$\sum_{k=1}^{(j_s+1)} \binom{j_s+1}{n_i + k} \binom{n_i + k}{n_i + k - j_s + 1}$$

$$\sum_{k=n_{is} + j_{sa}^{ik} - k_1}^{()} \binom{()}{n_s = n_{ik} + j_{ik} - j_i - k_2}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(l_s - j_{sa}^{ik} + 1)} \sum_{j_{ik}=j_i + j_{sa}^{ik}}^{(l_s + s - j_i - j_{sa}^{ik} + 1)} \sum_{j_i=s+1}^{(n_i - j_i + 1)} \frac{(n_i - j_i + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{is} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - \mathbb{k} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_i + j_{sa}^{ik} - s}^{(l_i)} \sum_{(j_i=l_s + s)}^{(l_i)}$$

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$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - j_i - n - 1)!}{(n_s - j_i - n - 1 - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{sa}^{ik} - j_i - j_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
\end{aligned}$$

$$\sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-1)} \sum_{(j_i=s+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{\binom{()}{}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz \mathcal{S}_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\begin{aligned}
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{j_s=2}^{(l_s)} \sum_{j_i=l_{ik}}^{(n)} \sum_{j_{sa}^{ik}=j_i - j_{ik} + s - j_{sa}^{ik}}^{(n)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{\binom{()}{j_s = j_{ik} - j_{sa}^{ik} + 1}} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_s + j_{sa}^{ik} - 1} \sum_{j_i = j_{sa}^{ik} + s - j_{sa}^{ik}}^{\binom{()}{j_i = j_{sa}^{ik} + s - j_{sa}^{ik}}} \sum_{n + \mathbb{k}}^{\binom{()}{n_i = n + \mathbb{k} + 1}} \sum_{n_i = n + \mathbb{k} + 1}^{\binom{()}{n_i = n + \mathbb{k} + 1}} \sum_{j_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1}^{\binom{()}{j_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1}} \sum_{j_i = \mathbb{k}_2}^{\binom{()}{j_i = \mathbb{k}_2}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} - s - j_{sa}^{ik} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} - 1 > l_s \wedge l_i - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n - 1 \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+k_2-1}^{n_{is}+j_s-j_{ik}} \sum_{(n_{is}+j_{ik}-n_{i-k_2})}^{(n_{is}+j_{ik}-n_{i-k_2})}$$

$$\frac{(n_i - n_{i-k_2} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{i-k_2} - k_2 - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_{ik} - n_{is} - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\}$$

$$s > 4 \wedge s = s + 1 \wedge$$

$$\mathbb{k}: z = 2 \wedge (\mathbb{k} = \mathbb{k}_1 + \dots) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-1)} \sum_{(j_i=l_i+n-D)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_s - j_{sa} - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(n)} \\
& \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(n)} \sum_{(j_i=l_s+s)}^{(n)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{()} \sum_{j_s=j_{ik} - j_{sa}^{ik} + 1}^{()} \sum_{j_{ik}=j_i + j_s}^{()} \sum_{j_i=l_i + n - D}^{()} \sum_{n_i=n + k}^{()} \sum_{n_{is}=n + k - j_s + 1}^{()} \sum_{n_s=n_{ik} + j_{ik} - j_i - k_2}^{()} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$s > 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{()}$$

$$\sum_{n_{ik} = n - \mathbb{k}}^{(n_i - \mathbb{k} - 1)} \sum_{(n_{is} = n + \mathbb{k} - j_s)}^{(n_i - \mathbb{k} - 1)}$$

$$\sum_{(j_i - j_{ik} - \mathbb{k}_1)}^{(j_{ik} - j_i - \mathbb{k}_2)} \sum_{(n_{ik} = n - j_{ik} + 1)}^{(n_s - j_i + 1)}$$

$$\frac{(n_{ik} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{ik} - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_s + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - \mathbb{k} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik} = l_s + j_{sa}^{ik}}^{n + j_{sa}^{ik} - s} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{()}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - 1)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{\binom{()}{j_i=j_{ik}+s-j_{sa}^{ik}}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}
 \end{aligned}$$

GÜLDÜZYAZ

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_i + n - D - s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \\
 & \sum_{k=0}^{(l_s)} \sum_{l_s-k}^{(l_s)} \sum_{D-s+1}^{(l_s)} n_{ik-s}^{(k)} \sum_{j_i=j_s+j_{sa}^{ik}-1}^{(j_i)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(j_i)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

GÜLDÜMÜYA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j_{ik}=k+s-j_{sa}^{ik})}$$

$$\sum_{k_1=0}^{n-k} \sum_{(n_{is}=n-k_1+1)}$$

$$\sum_{(n_{ik}=n_{is}+j_{ik}-k_1-k_2-j_i-k_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > l_i \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_s \leq D + j_s + s - n - 1 \wedge$$

$$(D - n - n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{i-1}, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_{z^S}^{S_{j_s, j_{ik}, j_i}} &= \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 &\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-1)} \sum_{(j_i=l_{ik}+n+s-D-j_{ik})}^{(l_s+s-1)} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_i+j_s-j_{ik}-n_{is}+j_{ik}-k_2)} \sum_{(n_s=n-j_i+1)}^{(n_i-j_s+1)} \\
 &\frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_i-n_{ik}-j_s+1)!} \\
 &\frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 &\frac{(n_{ik}-n_{ik}-k_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k_2)!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
 &\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
 &\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(n)} \sum_{(j_i=l_s+s)}^{(n)} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDÜZYA

$$\frac{\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - l_{k_2})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(j_s - 2)!}$$

$$\frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-1)} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$f_{zS} j_{ik} j_i = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})} ()$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{(l_s)} \binom{l_s}{j_s} \cdot \\
 & \sum_{j_{sa}^{ik}=n+l_{ik}-j_{ik}-j_s}^{n+l_{ik}-j_{ik}-j_s} \binom{n+l_{ik}-j_{ik}-j_s}{j_{sa}^{ik}} \cdot \\
 & \sum_{j_{ik}=n+l_{ik}-j_{ik}-j_s}^{n+l_{ik}-j_{ik}-j_s} \binom{n+l_{ik}-j_{ik}-j_s}{j_{ik}} \cdot \\
 & \sum_{n_{is}=n+l_{ik}-j_{ik}-j_s}^{n+l_{ik}-j_{ik}-j_s} \sum_{n_{ik}=n+l_{ik}-j_{ik}-j_s}^{(n_i - j_s + 1)} \binom{n_i - j_s + 1}{n_{ik}} \cdot \\
 & \sum_{n_{ik}=n+l_{ik}-j_{ik}-j_s}^{n+l_{ik}-j_{ik}-j_s} \sum_{n_s=n-j_i+1}^{(n_{ik} + j_{ik} - j_i - l_{k_2})} \binom{n_{ik} + j_{ik} - j_i - l_{k_2}}{n_s} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDENWA

$$\sum_{k=1}^{\binom{D}{k}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{D-k}{j_s}} \sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{\binom{D-k-j_s}{j_i}} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n-l_k-j_s+1)}^{\binom{n_i-j_s+1}{n_{is}}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{\binom{D-k-j_s}{n_{ik}}} \sum_{(n_{ik}+j_{ik}-j_i=l_{k_2})}^{\binom{D-k-j_s}{n_{ik}+j_{ik}-j_i}} \frac{(n_i+2 \cdot j_s+j_{sa}^{ik}-j_{ik}-l_{k_2}-j_{sa}^s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot 2 \cdot j_s! \cdot (j_{sa}^{ik}-j_{ik})! \cdot 2 \cdot j_{sa}^s!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D-j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq n-1 \wedge$$

$$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j_{sa}^{ik}+j_{sa}^{ik}-s \wedge$$

$$j_{ik}+s-j_{sa}^{ik} \leq j_i \leq n-l_i \wedge$$

$$l_{ik}-j_{sa}^{ik}+1 > 0 \wedge l_i+j_s-s=l_{k_2} \wedge$$

$$D+l_{k_1}-n < l_i \leq D-l_s+s-l_{k_2}-1 \wedge$$

$$(D \geq n < n \wedge I=l_k > 1) \wedge$$

$$j_{sa}^{ik} < j_i-1 \wedge j_{sa}^{ik} < j_{sa}^{ik}-1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$$4 \wedge l_{k_2} = s+l_k \wedge$$

$$l_{k_2}: z=2 \wedge l_k = l_{k_1}+l_{k_2} \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{\binom{D}{k}} \sum_{(j_s=2)}^{\binom{l_{ik}+n-D-j_{sa}^{ik}}{j_s}}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \binom{(\quad)}{j_i=j_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s-j_{i+1})}^{(n_{ik}+j_{ik}-j_i-l_{k_1})}$$

$$\frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!}$$

$$\frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!}$$

$$\frac{(n_{ik}-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!}$$

$$\frac{(n_s-j_i-n-1)! \cdot (n-j_i)!}{(n_s-1)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_i+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=1}^s \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \binom{(\quad)}{j_i=j_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)}$$

GÜLDENWA

$$\frac{\sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_s)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(j_s)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i)} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(j_s)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\mathbf{n} + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

GÜLDÜMÜŞA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: (j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^s, \dots, \mathbb{k}_2, j_{sa}^s) \wedge$$

$$s > s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2, \dots, \mathbb{k} = \mathbb{k}_1 + \mathbb{k} \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i + j_{sa}^{ik} - s} \sum_{(j_i=s+1)}^{(l_s + s - 1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)}$$

$$\frac{\sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} - j_i - l_{ik} - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=l_s+s)}^{(l_i)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\frac{\sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!}$$

$$\frac{(l_s + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_{ik} - l_s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_i + j_{sa}^{ik} - s}^{(l_s + s - 1)} \sum_{(j_i = s + 1)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{(\)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1) \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\}$$

$$s > 4 \wedge s = s + 1 \wedge$$

$$\mathbb{k}: z = 2 \wedge \dots = \mathbb{k}_1 + \dots) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(l_s - j_s - 1)!} \cdot \\
 & \frac{(l_{jk} - l_s - j_{sa} + 1)!}{(j_s + l_{jk} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{j_s=2}^{(l_s)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(l_i)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - l_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{j_{sa}^{ik}-1} \binom{(\quad)}{j_{sa}^{ik+1}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s - j_{sa}^{ik} - 1} \binom{(\quad)}{j_i = j_{ik} + s - j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \binom{(\quad)}{\sum_{(n_s=n_{ik}+j_{ik}-j_i-k_2)}$$

$$\frac{(n_i - n - k_1 - k_2 - 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(n_i - n - k_1 - k_2) < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2)$$

$$fz^S j_s, j_{ik}, j_i = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{sa}^{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$f_{s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j_i + j_{sa}^{ik} - s} \sum_{(j_i=l_i+n-D)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - l_{ik} - s)!} \cdot \\
 & \frac{(D - j_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_s=2}^{(l_s)} \sum_{j_{ik}=l_{ik}+n-D}^{(n)} \sum_{n_i=n+k_1}^n \sum_{n_{is}=n+k_1-j_s+1}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1, \dots, +s-1)}$$

$$\sum_{(j_s = j_i + j_{sa}^{is}, \dots, l_i - D)}$$

$$\sum_{(n_i - j_s + 1, \dots, +k_1 (n_i - j_s + 1 + k_1 - j_s + 1))}$$

$$\sum_{(n_{ik} = n_{is} - j_{ik} - k_1, \dots, n_{ik} + j_{ik} - j_i - k_2)}$$

$$\frac{(n_j + 2 \cdot j_s + j_{sa}^{is} - j_{ik} - j_i - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2)! \cdot (n_j + 2 \cdot j_s + j_{sa}^{is} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n > l_i \leq D + l_s + s - n - 1) \vee$$

$$(D < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$f_z S_{j_{sa}^s, j_i} = \sum_{k=1}^{(j_{sa}^{ik}+1)} \binom{j_{sa}^{ik}+1}{j_s} \binom{l_s+j_{sa}^s}{j_{ik}=l_{ik}+n} \binom{n}{n-D} \binom{n_i-j_s+1}{n_i=n+k} \binom{n_i-j_s+1}{n_{is}=n+k-j_s+1} \binom{n_{is}+j_{ik}-k_1}{n_{ik}=n+k_2-j_{ik}+1} \binom{n_{ik}+j_{ik}-j_i-k_2}{n_s=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{(j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}$$

$$\frac{(n_{is}+j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-l_{ik}-1)!}{(n_{is}-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-l_{ik}-l_k-1)!}{(j_{ik}-l_{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_k)!}$$

$$\frac{(n_{is}-n_s-l_k-1)!}{(j_i-l_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-l_k)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

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$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_i)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()} \sum_{(n_s=n_{ik}+j_i-j_{ik}-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^i)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1) \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_i \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1) \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$\begin{aligned}
 f_{z^S}^{j_s, j_{ik}, j_i} &= \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{(n)} \\
 &\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}} \sum_{(j_i=l_i+n-D)}^{(n)} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=k-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n+k_2}^{n_i+j_s-j_{ik}} \sum_{(n_{is}=n-j_i)}^{(n_{ik}+j_{ik}-i-k_2)} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 &\frac{(n_{ik} - n_{is} - k_2 - 1)!}{(j_i - k_2 - 1)! \cdot (n_{is} + j_{ik} - n_s - j_i - k_2)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 &\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 &\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)} \\
 &\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - l_{k_1})!} \cdot \\
 & \frac{(n_{i_k} - n_s - l_{k_2} - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n_{i_s} - 1)!}{(n_s - j_i - n_{i_s} - 1 - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - j_{i_k} - j_{s_a}^{i_k} + 1)!}{(j_{i_k} + l_{i_k} - j_{i_k} - j_{s_a}^{i_k})! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(l_i + j_{s_a}^{i_k} - l_{i_k} - s)!}{(j_{i_k} + l_i - j_i - l_{i_k})! \cdot (j_i + j_{s_a}^{i_k} - j_{i_k} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^s \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)} \\
 & \sum_{j_{i_k}=j_s+j_{s_a}^{i_k}-1} \sum_{(j_i=j_{i_k}+s-j_{s_a}^{i_k})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n_{i_k}+j_{i_k}-j_i-l_{k_2})}^{()}
 \end{aligned}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) =$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(l_i)} \sum_{(j_i=s)}^{(l_i)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(l_i + j_{sa}^{ik} - j_i - l_{ik})! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)} \sum_{i_1, \dots, i_s}^{(\cdot)} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=j_{ik}-l_{ik}-1)}^{(\cdot)} \sum_{n_s=j_{ik}-j_i-l_{k_2}}^{(\cdot)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_i - l_{ik} - l_{k_2} - l_{k_1})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D - s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_s = -n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i < n \wedge$$

$$l_i - j_{sa}^{ik} + l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n$$

$$(D \geq l_i < n \wedge l = l_{k_1} + l_{k_2}) \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^i, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = j_{sa}^i + l_{k_1} \wedge$$

$$l_{k_2} = j_{sa}^i - 2 \wedge l_{k_1} = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=s)}^{(l_i)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i+l_k}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - l_{k_2} - 1)! \cdot (n - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_i - j_{ik})!}{(j_{ik} - j_{ik})! \cdot (n - j_{sa}^{ik})!} \cdot \\
 & \frac{(n - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{()} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_i=s)}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}^{()} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$f_z^S j_s j_{ik} j_{sa}^{ik} = \sum_{k=1}^{()} \sum_{j_s=1}^{()} \sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{n_i=n+k}^{(n_i-j_{ik}+1)} \sum_{n_{ik}=k_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j_i-k_2)} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - j_{ik} - k_1 - 1)!}{(j_{ik} - k_1 - 1)! \cdot (i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - k_2 - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{j_s=1}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{j_i=s}^{()}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2} (n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)! / ((n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)! \cdot (D - l_i)! / ((D + s - n - l_i)! \cdot (n - \dots)!))$$

$((D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$

$l_i \leq D + s - n) \vee$

$(D \geq n < n \wedge l_s = 1 \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$

$(D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_i + s + 1 > l_s$

$l_i \leq D + s - n) \wedge$

$(D \geq n < n \wedge l = \mathbb{k} > 1 \wedge$

$j_{sa}^{ik} < j_i - 1 \wedge j_{sa}^{ik} < j_{sa}^s - 1 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$

$> 4 \wedge j_{sa}^s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i}^{n_{ik}+j_{ik}-j_i-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_i - l_{k_2})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!}$$

$$\frac{(j_i - j_{ik})!}{(j_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(n_i + j_{sa}^{ik} - l_{k_1} - s)!}{(n_i + l_i - j_i - 1)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_i=s)}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$\begin{aligned}
 &= \sum_{j_i = j_{sa}^{ik} + 1}^{(j_i + j_{sa}^{ik} - s)} \sum_{(l_{ik} + s - j_{sa}^{ik})}^{(l_s - l_{ik})} \\
 &\sum_{j_{ik} = j_{sa}^{ik} + 1}^n \sum_{(j_i = s + 1)}^{(n_i - j_s + 1)} \\
 &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
 &\sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}
 \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=l_{ik}+j_s-j_{sa}^{ik}+1)}^{(l_i)}$$

$$\sum_{(n_{is}=n_{ik}+j_s-j_{ik}+1)}^{n} \sum_{(n_{ik}+j_{ik}-j_i-l_{ik})}^{(n_{ik}+1)}$$

$$\frac{(n_{is}+j_s-j_{ik}-l_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-l_{ik}-1)!}{(n_{ik}+l_{ik}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-1)!} \cdot \frac{(n_{is}-1)!}{(n_{is}-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-l_{ik}-l_{k_1}-1)!}{(j_{ik}-l_{k_1}-1)! \cdot (n_{ik}+j_s-n_{ik}-j_{ik}-l_{k_1})!}$$

$$\frac{(n_{ik}-n_s-l_{k_2}-1)!}{(j_i-l_{k_2}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-l_{k_2})!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-j_{sa}^{ik})} \sum_{(j_i=s+1)}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}$

$l_i \leq D + s - n$

$(D \geq n < n \wedge l = \mathbb{k} > 0)$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1$

$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2, \dots, j_{sa}^i\}$

$s > 4 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z: z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \dots \Rightarrow$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=s+1)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - \mathbb{k}_2 - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - \mathbb{k}_2 - 1)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + \mathbf{n} - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=l_s+s)}^{(l_i)} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_{ik}=j_i+l_s-l_{ik}}^{(n-l_i)} \sum_{(j_i=s+1)}^{(l_s+s-1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(n-l_i)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

- $l_s > 1 \wedge l_s \leq D - n + 1 \wedge$
- $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$
- $j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$
- $l_i \leq D + s - n \wedge$

$$\sum_{k=1}^{\binom{D}{j_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{D}{j_s}} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{ik}^s)}^{\binom{D}{j_i}} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=l_k-j_s+1)}^{\binom{D}{n_i}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{ik}}^{\binom{D}{n_{ik}}} \sum_{(n_{is}=n_{ik}+j_{ik}-j_{ik}^s)}^{\binom{D}{n_{is}}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik}^s - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik}^s - l_{k_2} - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s = D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{ik} + j_{sa}^{ik} - s \wedge$

$j_{ik} + j_{sa}^{ik} \leq j_i \leq j_{ik} + j_{sa}^{ik} - 1 \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \leq l_i \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$

$l_i \leq l_{ik} + s - n \wedge$

$D \geq n < n \wedge l = l_{k_1} + l_{k_2} > 1 \wedge$

$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$

$> 4 \wedge s + l_{k_2} \wedge$

$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{\binom{D}{j_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{D}{j_s}}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_i)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_1})}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_{ik}-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!} \\
 & \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()}
 \end{aligned}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) =$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{j_{sa}^{ik+1}} \sum_{(j_s=2)}$$

$$\sum_{k=j_s+l_{ik}-l_s}^{(j_i=j_{ik}+s-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$f_{z=2}^{j_{sa}^{ik}, j_i} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}-l_s}^{(l_i)} (j_i=j_{ik}+s-j_{sa}^{ik})$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{s+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_{ik}+s-j_{sa}^{ik})}^{(n_{ik}+1)} \sum_{(n+l_{ik} \dots)}^{(n_{is}+1)} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i - j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < 1 \leq D + j_i + s - n - 1 \wedge$$

$$(D - n - n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{i-1}, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j_i} &= \sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)} \\
 &\quad \sum_{j_{ik}=j_{s_a}^{ik}+1}^{j_i+j_{s_a}^{ik}-s} \sum_{(j_i=l_i+n-)}^{(l_{ik}+s-j_{s_a}^{ik})} \\
 &\quad \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 &\quad \sum_{n_{ik}=n+l_{k_2}-j_{i_1}+1}^{n_{is}+j_s-j_{ik}-j_{i_1}+j_{ik}-l_{k_2}} \sum_{(n_s=n-j_i+)}^{(n_i-j_s+1)} \\
 &\quad \frac{(n_i - n_{i_1} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_1} - j_s + 1)!} \\
 &\quad \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \\
 &\quad \frac{(n_{ik} - n_{i_1} - l_{k_2} - 1)!}{(j_i - j_{i_1} - 1)! \cdot (n_{is} + j_{ik} - n_s - j_i - l_{k_2})!} \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 &\quad \frac{(l_i + j_{s_a}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{s_a}^{ik} - j_{ik} - s)!} \\
 &\quad \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\quad \sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)} \\
 &\quad \sum_{j_{ik}=j_{s_a}^{ik}+1}^{l_{ik}} \sum_{(j_i=l_{ik}+s-j_{s_a}^{ik}+1)}^{(n)} \\
 &\quad \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\frac{\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1 - 1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - k_2 - 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(j_s - 2)!}$$

$$\frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (l_i + j_{sa} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-j_{sa}^{ik})} \sum_{(j_i=l_i+n-D)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-k_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$\begin{aligned} f^z \mathcal{S}_{j_s, j_{ik}}^{j_i} &= \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)} \\ &\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(l_s+s-1)} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\ &\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{(j_i - l_i)} \sum_{j_s=j_{ik} - l_{ik}}^{(j_i - l_i - k)} \sum_{j_{ik}=k+1}^{(j_i - l_i - k)} \sum_{j_i=l_s+s}^{(j_i - l_i - k)} \\
 & \sum_{n_i=n+l_k}^{(j_i - l_i - k)} \sum_{n_{is}=n+l_k - j_s + 1}^{(j_i - l_i - k - n_i)} \sum_{n_{ik}=n_{is} - j_{ik} - k_1}^{(n_{ik} + j_{ik} - j_i - k_2)} \sum_{n_{ik}=k_2 - j_{ik} + 1}^{(n_s - n - j_i + 1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-1)} \sum_{(j_i=l_i+n-p)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-1}^{(\cdot)} \sum_{(n_{is}=n_{ik}+j_{ik}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s = D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + j_{sa}^{ik} \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1$

$l_{ik} - j_{sa}^{ik} + 1 = l_i \wedge l_i + j_{sa}^{ik} - s > l_i \wedge$

$D + 1 - n < l_i \leq D - l_s + s - 1 \wedge$

$D \geq n < n \wedge I = \mathbb{k} > 1 \wedge$

$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$

$> 4 \wedge s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(n)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)!(n_i-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_{ik}-k_2-1)!}{(j_i-j_{ik}-1)!(n_{ik}-j_{ik}-n_s-j_i-k_2)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_i+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^l \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_i - s)!}{(j_{ik} + l_i - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{l_i} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{()} \\
 & \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_{ik}} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{()} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{()} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f_{zS}^{j_s, j_{sa}^{ik}, j_i} &= \sum_{k=1}^{\binom{()}{}} \\ & \sum_{k=j_{sa}^{ik}+1}^{n+j_{sa}^{ik}-l_{ik}-1} \sum_{(j_i=l_i+n-D)}^{\binom{(n)}{}} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\binom{(n_i-j_s+1)}{}} \\ & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{\binom{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}{}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \end{aligned}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_s = j_{ik} + l_s - l_{ik})} \sum_{(j_i = j_{ik} + l_i - l_{ik})}$$

$$(n_i - j_s + 1)$$

$$\sum_{(n_{ik} + l_{k_1} + l_{k_2} - j_s + 1)} \sum_{(n_{ik} + l_{k_1} + l_{k_2} - j_s + 1)}$$

$$n_{is} + j_{ik} - l_{k_1} \quad (n_{ik} + l_{k_1} + l_{k_2} - j_i - l_{k_2})$$

$$\sum_{(n_{ik} + l_{k_1} + l_{k_2} - j_{ik})} \sum_{(n_s = n - j_i + 1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - l_{k_1} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_{ik} - l_{k_2} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{()} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

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$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_i)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}^{()} \sum_{(n_s=n_{ik}+j_i-j_{ik}-k_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - k_1 - k_2 - 2 \cdot j_{sa}^{ik})!}{(n_i - n - k_1 - k_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - j_{ik} = l_{ik} \wedge$$

$$D + n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(n \geq n < n \wedge k = k > 0)$$

$$j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^{ik}, \dots, j_{sa}^{ik}, j_{sa}^{ik}, \dots, k_2 - j_{sa}^{ik}\} \wedge$$

$$s > 4 \wedge s = s$$

$$k_z \cdot z = z \wedge k = k_1 + k_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{()}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=l_i+n-D)}^{(n)}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{iS}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{iS}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{iS} - 1)!}{(j_s - 2)! \cdot (n_i - n_{iS} - j_s + 1)!} \cdot \\
 & \frac{(n_{iS} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{iS} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_s - 1)!}{(n_s - j_i - n - l_s - 1 - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{ik} - l_{ik} - s)!}{(j_{ik} + l_{ik} - j_i - l_{ik})! \cdot (j_i + j_{sA}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^n \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-j_{sA}^{ik}+1)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j_i=j_{ik}+s-j_{sA}^{ik})}^{(n)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{iS}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{iS}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{iS} - 1)!}{(j_s - 2)! \cdot (n_i - n_{iS} - j_s + 1)!} \cdot
 \end{aligned}$$

GÜLDÜMAYA

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik})!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - j_i - l_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{j_{ik} - j_i - l_{ik} - 1} \sum_{j_s = l_i + n - D - s + 1}^{j_{ik} - j_i - l_{ik} - k}$$

$$\sum_{k=j_s + l_{ik} - l_s}^{j_{ik} - j_i - l_{ik} - 1} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{(j_i = j_{ik} + s - j_{sa}^{ik})}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S_{j_s, j_{ik}} = \sum_{i=1}^{D-s} \sum_{(j_s=2)}^{(n)} \sum_{j_{ik}+l_{ik}-l_s}^{(n)} (j_i=l_i+n-D) \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

$$\sum_{k=1}^{n} \sum_{(n_{is}=n-k+1)}^{(n_{is}+1)}$$

$$\frac{(n_{is}+j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-l_{ik}-1)!}{(n_{is}-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-l_{ik}-k_1-1)!}{(j_{ik}-l_{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!}$$

$$\frac{(n_{is}-n_s-k_2-1)!}{(j_i-l_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k_2)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n)}$$

GÜLDÜZÜMÜYA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$

$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge$

$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > 4 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z: z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=s+1)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + \mathbf{n} - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_i)} \sum_{(j_i=l_s+s)}^{(l_i)} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
 \end{aligned}$$

GÜLDÜMÜKKA

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 1)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i}^{(j_i+l_{ik}-l_i)} \sum_{j_{sa}^{ik}=j_{ik}-j_s}^{(j_{ik}-j_s)} \sum_{j_i=s+1}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(j_i+l_{ik}-l_i)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$j_i > n - l_i \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \Rightarrow$$

$$fz S_{j_s, i, k, j_i} = \sum_{k=1}^{(j_s - j_{sa}^{ik} + 1)} \sum_{i_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik}} \sum_{i_i=l_{ik}}^{(n_i - j_s + 1)} \sum_{n_i=n+k}^{(n_{is}+n+k-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{j_{ik}-k_1} \sum_{(n_{ik}+j_{ik}-j_i-k_2)}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜNYA

GÜLDENYA

$$\begin{aligned}
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik} (j_i=j_{ik}+l_i-l_i)}^{l_{ik}} \sum_{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{is}+j_s-j_{ik}} \sum_{(n_{ik}+j_{ik}-i-k_2)} \\
 & \sum_{n_{ik}=n+k_2-1} \sum_{(n_s=n-j_i)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - k_2 - 1)!}{(j_i - k_2 - 1)! \cdot (n_{is} + j_{ik} - n_s - j_i - k_2)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+l_i-l_{ik})} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_{k_1} - l_{k_2})!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{k_1} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge l = l_{k_1} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\}$$

$$s > 4 \wedge s = s + 1 \wedge$$

$$l_{k_1} : z = 2 \wedge l_{k_1} = l_{k_1} + 1 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_{k_1}}^n \sum_{(n_{is}=n+l_{k_1}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_i=j_{ik}+l_i-l_{ik})} \sum_{(j_s=2)}^{(l_s)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(n_i-j_s+1)} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{j_{ik}, j_i} = \sum_{k=1}^{j_{ik} - j_{sa}^{ik} + 1} \sum_{(j_s=2)}^{(l_s+s-1)} \sum_{k=j_i+l_{ik}-l_i}^{(j_i=l_i+n-D)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_i}^{(n)} \sum_{(j_s+s)}$$

$$\sum_{n+l_k}^{(n_i-j_s+1)} \sum_{n+l_k-j_s+1}$$

$$\sum_{n+l_k-j_{ik}-k_1}^{n_{is}-j_{ik}-k_1} \sum_{(j_i-k_2)} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_i+n-D)}^{(l_s+s-1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+l_{k_2}-j_i-l_{k_2})}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - 2 \cdot j_s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - 2 \cdot j_s)!} \cdot \frac{(l_s - 2)!}{(l_s - 2)! \cdot (j_s - 2)!} \cdot \frac{(D - j_s - n - l_i)! \cdot (n - j_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 < j_{ik} \leq j_s + j_{sa}^{ik} - s$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - 1 = l_{ik} \wedge$$

$$D + j_{ik} - n < l_{ik} \wedge D + l_s + j_{sa}^{ik} - 1 = l_{ik} - 1$$

$$(n \geq n < n) \wedge l_k > 1$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s \in \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = j_{sa}^{ik} \wedge$$

$$l_{k_2} = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_s)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
& \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
& \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_{ik} + l_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
\end{aligned}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \sum_{j_s=1}^{l_s} \sum_{j_{ik}=j_s}^{n - j_s - 1} \sum_{j_{sa}^{ik}=j_{ik} - j_s + 1}^{l_s - j_{sa}^{ik} - 1} \sum_{j_i=n + j_{sa}^{ik} - D - s}^{n - j_{sa}^{ik} - 1} \binom{()}{j_i = j_{ik} + l_i - l_{ik}} \sum_{n_i=n + \mathbb{k}}^n \sum_{(n_{is}=n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s=n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_s, j_{ik}} = \sum_{i=1}^{D-s} \sum_{(j_s=2)}^{(D-s)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{i=1}^n \sum_{(n_i=n_i+1)}^{(n_i+1)}$$

$$\sum_{n_{ik}+k_2-j_{ik}}^{n_{is}+j_s-j_{ik}-1} \sum_{(j_i=j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}$$

$$\frac{(n_{is} - n_{is} - 1)!}{(n_{is} - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{is} - k_1 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$D + s - n < l_i \leq D + l_s - n - 1 \wedge$

$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge$

$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > 4 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \dots \Rightarrow$

$$fz^S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - 2)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + \mathbf{n} - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(n)} \sum_{(j_i=l_s+s)}^{(n)} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j_{sa}^{ik} - l_{sa} (j_{sa}^{ik} = l_i + n + j_{sa} - D - s)}^{(l_s + j_{sa} - 1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$n > n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$\begin{aligned}
 & \sum_{k=1} \sum_{(j_s=2)}^{(l_s)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}}^{n+j_{sa}^{ik}-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-1}^{n_{is}+j_s-j_{ik}} \sum_{(n_s=n-j_i+l_{ik}-k_2)}^{(n_i+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{ik} - k_2 - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_{ik} - n_s - j_i - k_2)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{(\quad)}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{sa}^s + s - n - l_i - j_{sa})! \cdot (n + j_{sa}^s - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\}$$

$$s > 4 \wedge s = s + \dots \wedge$$

$$\mathbb{k}_1 \cdot z = 2 \wedge \dots = \mathbb{k}_1 + \dots \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{\binom{(\quad)}{j_s=2}}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{\binom{(\quad)}{j_i=j_{ik}+l_i-l_{ik}}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(\quad)}{n_{is}=n+\mathbb{k}-j_s+1}}^{(n_i-j_s+1)}$$

$$\sum_{n_{is}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{(\quad)}{n_s=n-j_i+1}}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^k + 1)!}{(j_s + l_{ik} - j_{sa}^k - 1)! \cdot (j_{ik} - j_{sa}^k + 1)!} \cdot \\
& \frac{(D - l_{ik})!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(l_s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^k+1)}^{(l_s)} \\
& \sum_{j_{ik}=j_s+j_{sa}^k-1}^{n+j_{sa}^k-s} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{(l_s)} \sum_{j_s=l_i+n-l_s+1}^{(l_s)} \sum_{j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j_i+j_{sa}^{ik}} \sum_{a=j_{ik}+l_{sa}-l_{ik}}^{(j_s+1)} \sum_{n_i+l_k \leq n_i+l_k-j_s+1} \sum_{n_i+l_k}^{(n_i+l_k)} \sum_{n_i+l_k}^{(n_i+l_k)} \sum_{n_i+l_k}^{(n_i+l_k)} \frac{(n_i + 2 \cdot j_s + j_{ik} - j_{ik} - j_i - l_{k_1} - l_{k_2} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_s - j_{sa}^{ik} > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge I = l_k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$s > 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j_i}} = \sum_{k=1} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_i+\mathbb{k}} \sum_{(j_i=s)}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_s=n-j_i+\mathbb{k}_2)}^{(n_{ik}+j_i-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_i - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_i=s)}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

GÜLDÜŞMÜŞA

$$D \geq n < n \wedge l_s = 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \Rightarrow$$

$$f_{z^j} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\cdot)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\)} \sum_{(j_s=1)}^{(\)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\)} \sum_{(j_i=s)}^{(\)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{(\)} \sum_{n_s=n_{ik}-j_i-l_{k_2}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - 2 \cdot j_s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - l_{k_1} - 2 \cdot j_s)!} \cdot \frac{(n - l_i)!}{(n - n)! \cdot (n - s)!}$$

GÜLDÜMİNARA

DİZİN

B

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.1.1.1.1/3-4

ilk düzgün simetrik olasılık,
2.3.2.2.1.1.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.1.1.2.1/3-4

ilk düzgün simetrik olasılık,
2.3.2.2.1.1.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.1.1.3.1/3-4

ilk düzgün simetrik olasılık,
2.3.2.2.1.1.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.1.1.1.1/153-154

ilk düzgün simetrik olasılık,
2.3.2.2.1.1.1.1/162-163

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.1.1/210

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.1.1.2.1/153-154

ilk düzgün simetrik olasılık,
2.3.2.2.1.1.2.1/162-163

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.2.1/210

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.1.1.3.1/153-154

ilk düzgün simetrik olasılık,
2.3.2.2.1.1.3.1/162-163

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.3.1/210

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.1.4.1.1/3-4

ilk düzgün simetrik olasılık,
2.3.2.2.1.4.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.1.4.2.1/3-4

ilk düzgün simetrik olasılık,
2.3.2.2.1.4.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.1.4.3.1/3-4

ilk düzgün simetrik olasılık,
2.3.2.2.1.4.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu

simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.1.1.1/156-157

ilk düzgün simetrik olasılık,
2.3.2.2.1.1.1/165

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.1/215

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.1.1.2.1/156-157

ilk düzgün simetrik olasılık,
2.3.2.2.1.1.2.1/165

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.2.1/215

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.1.1.3.1/156-157

ilk düzgün simetrik olasılık,
2.3.2.2.1.1.3.1/165

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.3.1/215

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.1.1.4.1/156-157

ilk düzgün simetrik olasılık,
2.3.2.2.1.1.4.1/165

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.4.1/215

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.1.6.2.1/3-4

ilk düzgün simetrik olasılık,
2.3.2.2.1.6.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu

bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.1.6.3.1/3-4

ilk düzgün simetrik olasılık,
2.3.2.2.1.6.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin durumuna bağlı

ilk simetrik olasılık,
2.3.2.1.1.1.1/77

ilk düzgün simetrik olasılık,
2.3.2.2.1.1.1/61

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.1/106

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin durumuna bağlı

ilk simetrik olasılık,
2.3.2.1.1.1.2.1/77

ilk düzgün simetrik olasılık,
2.3.2.2.1.1.2.1/61

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.2.1/106

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin durumuna bağlı

ilk simetrik olasılık,
2.3.2.1.1.1.3.1/77

ilk düzgün simetrik olasılık,
2.3.2.2.1.1.3.1/61

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.3.1/106

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.2.1.1.1/4

ilk düzgün simetrik olasılık,
2.3.2.2.2.1.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.2.1.2.1/4

ilk düzgün simetrik olasılık,
2.3.2.2.2.1.2.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.2.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.2.1.3.1/4

ilk düzgün simetrik olasılık,
2.3.2.2.2.1.3.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.2.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.2.2.1.1/5

ilk düzgün simetrik olasılık,
2.3.2.2.2.2.1.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.2.2.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.2.2.2.1/5

ilk düzgün simetrik olasılık,
2.3.2.2.2.2.2.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.2.2.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.2.3.1/4

ilk düzgün simetrik olasılık,
2.3.2.2.2.3.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.2.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.2.4.1.1/4

ilk düzgün simetrik olasılık,
2.3.2.2.2.4.1.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.2.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.2.4.2.1/4

ilk düzgün simetrik olasılık,
2.3.2.2.2.4.2.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.2.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.2.4.3.1/4

ilk düzgün simetrik olasılık,
2.3.2.2.2.4.3.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.2.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.2.6.1.1/4

ilk düzgün simetrik olasılık,
2.3.2.2.2.6.1.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.2.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.2.6.2.1/4

ilk düzgün simetrik olasılık,
2.3.2.2.2.6.2.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.2.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.2.6.3.1/4

ilk düzgün simetrik olasılık,
2.3.2.2.2.6.3.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.2.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.2.7.1.1/5

ilk düzgün simetrik olasılık,
2.3.2.2.2.7.1.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.2.7.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.2.7.2.1/5

ilk düzgün simetrik olasılık,
2.3.2.2.2.7.2.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.2.7.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.3.2.7.3.1/5

ilk düzgün simetrik olasılık,
2.3.2.2.3.2.7.3.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.3.2.7.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.3.1.1.1/4

ilk düzgün simetrik olasılık,
2.3.2.2.3.2.1.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.3.1.1.1/4-5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.3.1.2.1/4

ilk düzgün simetrik olasılık,
2.3.2.2.3.2.2.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.3.1.2.1/4-5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.3.1.3.1/5

ilk düzgün simetrik olasılık,
2.3.2.2.3.2.2.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.3.1.3.1/4-5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımlı durumlu simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.3.2.1.1/5

ilk düzgün simetrik olasılık,
2.3.2.2.3.2.1.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.3.2.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.3.2.2.1/5

ilk düzgün simetrik olasılık,
2.3.2.2.3.2.2.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.3.2.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.3.2.3.1/4

ilk düzgün simetrik olasılık,
2.3.2.2.3.2.3.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.3.2.3.1/4-5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin herhangi iki durumuna bağlı

- ilk simetrik olasılık, 2.3.2.1.4.1.1.1/4
- ilk düzgün simetrik olasılık, 2.3.2.2.4.1.1.1/3-4
- ilk düzgün olmayan simetrik olasılık, 2.3.2.3.4.1.1.1/5
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin herhangi iki durumuna bağlı
- ilk simetrik olasılık, 2.3.2.1.4.1.2.1/4
- ilk düzgün simetrik olasılık, 2.3.2.2.4.1.2.1/3-4
- ilk düzgün olmayan simetrik olasılık, 2.3.2.3.4.1.2.1/5
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin herhangi iki durumuna bağlı
- ilk simetrik olasılık, 2.3.2.1.4.1.3.1/4
- ilk düzgün simetrik olasılık, 2.3.2.2.4.1.3.1/3-4
- ilk düzgün olmayan simetrik olasılık, 2.3.2.3.4.1.3.1/5
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin herhangi iki durumunun bulunabileceği olaylara göre
- ilk simetrik olasılık, 2.3.2.1.4.1.1.1/701-702
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin herhangi iki durumunun bulunabileceği olaylara göre
- ilk simetrik olasılık, 2.3.2.1.4.1.2.1/701-702
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin herhangi iki durumunun bulunabileceği olaylara göre
- ilk simetrik olasılık, 2.3.2.1.4.1.3.1/701-702
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
- ilk simetrik olasılık, 2.3.2.1.5.1.1.1/5
- ilk düzgün simetrik olasılık, 2.3.2.2.5.1.1.1/3-4
- ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.1.1.1/6
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
- ilk simetrik olasılık, 2.3.2.1.5.1.2.1/5
- ilk düzgün simetrik olasılık, 2.3.2.2.5.1.2.1/3-4
- ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.1.2.1/6
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
- ilk simetrik olasılık, 2.3.2.1.5.1.3.1/5
- ilk düzgün simetrik olasılık, 2.3.2.2.5.1.3.1/3-4
- ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.1.3.1/6
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
- ilk simetrik olasılık, 2.3.2.1.5.2.1.1/6-7
- ilk düzgün simetrik olasılık, 2.3.2.2.5.2.1.1/3-4
- ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.2.1.1/8
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
- ilk simetrik olasılık, 2.3.2.1.5.2.2.1/6-7
- ilk düzgün simetrik olasılık, 2.3.2.2.5.2.2.1/3-4
- ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.2.2.1/8
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
- ilk simetrik olasılık, 2.3.2.1.5.2.3.1/5
- ilk düzgün simetrik olasılık, 2.3.2.2.5.2.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.2.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.8.1.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.1.1.1/5

dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.8.1.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.1.2.1/5

dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.8.1.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.6.1.1/6-7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.2.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.8.2.2.1/6-7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.2.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.8.2.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.1.1.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.6.1.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.1.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.1.2.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.6.1.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.1.3.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.6.1.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.2.1.1/6

ilk düzgün simetrik olasılık, 2.3.2.2.6.2.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.2.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.2.2.1/6

ilk düzgün simetrik olasılık,
2.3.2.2.6.2.2.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.6.2.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.6.2.3.1/4-5

ilk düzgün simetrik olasılık,
2.3.2.2.6.2.3.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.6.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.6.4.1.1/5

ilk düzgün simetrik olasılık,
2.3.2.2.6.4.1.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.6.4.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımsız simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.6.4.2.1/5

ilk düzgün simetrik olasılık,
2.3.2.2.6.4.2.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.6.4.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.6.4.3.1/5

ilk düzgün simetrik olasılık,
2.3.2.2.6.4.3.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.6.4.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.6.6.1.1/5

ilk düzgün simetrik olasılık,
2.3.2.2.6.6.1.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.6.6.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımsız simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.6.6.2.1/5

ilk düzgün simetrik olasılık,
2.3.2.2.6.6.2.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.6.6.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.6.6.3.1/5

ilk düzgün simetrik olasılık,
2.3.2.2.6.6.3.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.6.6.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.6.7.1.1/6

ilk düzgün simetrik olasılık,
2.3.2.2.6.7.1.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.6.7.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.6.7.2.1/6

ilk düzgün simetrik olasılık,
2.3.2.2.6.7.2.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.6.7.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,
2.3.2.1.6.7.3.1/4-5

ilk düzgün simetrik olasılık,
2.3.2.2.6.7.3.1/3-4

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.6.7.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrisinin ilk
herhangi bir ve son durumunun
bulunabileceği olaylara göre herhangi bir
ve son duruma bağlı

ilk simetrik olasılık,
2.3.2.1.9.1.1.1/5

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.9.1.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,
2.3.2.1.9.1.2.1/5

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.9.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,
2.3.2.1.9.1.3.1/5

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.9.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,
2.3.2.1.9.2.1.1/6

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.9.2.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımsız simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,
2.3.2.1.9.2.2.1/6

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.9.2.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,
2.3.2.1.9.2.3.1/4-5

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.9.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,
2.3.2.1.9.4.1.1/5

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.9.4.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımsız simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,
2.3.2.1.9.4.2.1/5

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.9.4.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,
2.3.2.1.9.4.3.1/5

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.9.4.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,
2.3.2.1.9.6.1.1/5

ilk düzgün olmayan simetrik
olasılık, 2.3.2.3.9.6.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımsız simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

ilk simetrik olasılık, 2.3.2.1.9.6.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.6.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı ilk simetrik olasılık, 2.3.2.1.9.6.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.6.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı ilk simetrik olasılık, 2.3.2.1.9.7.1.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.7.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı ilk simetrik olasılık, 2.3.2.1.9.7.2.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.7.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı ilk simetrik olasılık, 2.3.2.1.9.7.3.1/4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.7.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı ilk simetrik olasılık, 2.3.2.1.7.1.1.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.1.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.1.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık, 2.3.2.1.7.1.2.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.1.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.1.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık, 2.3.2.1.7.1.3.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.1.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.1.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık, 2.3.2.1.7.2.1.1/7

ilk düzgün simetrik olasılık, 2.3.2.2.7.2.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.2.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık, 2.3.2.1.7.2.2.1/7

ilk düzgün simetrik olasılık, 2.3.2.2.7.2.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.2.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık, 2.3.2.1.7.2.3.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.2.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.2.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumda simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.4.1.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.4.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.4.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumda bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.4.2.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.4.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.4.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumda bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.4.3.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.4.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.4.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumda simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.6.1.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.6.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.6.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumda bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.6.2.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.6.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.6.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumda bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.6.3.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.6.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.6.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bir bağımsız durumda simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.7.1.1/7

ilk düzgün simetrik olasılık, 2.3.2.2.7.7.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.7.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bir bağımsız durumda bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.7.2.1/7

ilk düzgün simetrik olasılık, 2.3.2.2.7.7.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.7.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bir bağımsız durumda bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.7.3.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.7.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.7.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumda bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.1.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.1.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.1.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.1.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.1.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.1.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.2.1.1/7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.2.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.2.2.1/7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.2.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.2.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.2.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.4.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.4.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.4.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.4.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.4.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.4.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.6.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.6.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.6.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.6.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.6.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.6.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.7.1.1/7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.7.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.7.2.1/7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.7.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.7.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.7.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.1.1.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.1.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.1.2.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.1.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.1.3.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.1.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.2.1.1/8-9

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.2.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.2.2.1/9

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.2.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.2.3.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.2.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.4.1.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.4.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.4.2.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.4.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,
2.3.2.1.11.4.3.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.4.3.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,
2.3.2.1.11.6.1.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.6.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,
2.3.2.1.11.6.2.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.6.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,
2.3.2.1.11.6.3.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.6.3.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,
2.3.2.1.11.7.1.1/8-9

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.7.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,
2.3.2.1.11.7.2.1/8-9

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.7.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,
2.3.2.1.11.7.3.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.7.3.1/6

VDOİHİ’de Olasılık ve İhtimal konularının tanım ve eşitlikleri verilmektedir. Ayrıca VDOİHİ’de olasılık ve ihtimalin uygulama alanlarına da yer verilmektedir. VDOİHİ konu anlatım ciltleri ve soru, problem ve ispat çözümlerinden oluşmaktadır. Bu cilt bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz olasılık dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu olan ve bağımlı olasılıklı dağılımın ilk bağımlı durumuyla başlayan dağılımlarda, simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılığın, tanım ve eşitliklerinden oluşmaktadır.

VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık kitabında, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu olan ve bağımlı olasılıklı dağılımın ilk bağımlı durumuyla başlayan dağılımlarda, simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılığın, tanım ve eşitlikleri verilmektedir.

VDOİHİ’nin diğer ciltlerinde olduğu gibi bu ciltte de verilen eşitlikler, olasılık tablolarından elde edilen verilerle üretilmiştir. Diğer eşitlikler ise ana eşitliklerden teorik yöntemle üretilmiştir. Eşitlik ve tanımların üretilmesinde dış kaynak kullanılmamıştır.