

VDOİHİ

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

Cilt 2.3.3.3.7.1.1.830

İsmail YILMAZ

Matematik / İstatistik / Olasılık

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VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık Cilt 2.3.3.3.7.1.1.830

İsmail YILMAZ

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

Dili: Türkçe + Matematik Mantık



K. Atatürk

Türkiye Cumhuriyeti Devleti
Kuruluşunun
100. Yılı Anısına

DÜZELTME

Bu cilt için

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

simgesi yerine

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

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 bulunduğunda, 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

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

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

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

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

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

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

$f_Z S_{j_s^{sa}}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin durumuna bağlı tek kalan simetrik olasılık

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

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

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

${}^0 f_Z S_{j_s,j_i}^{DST}$: 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 tek kalan simetrik olasılık

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simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

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durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı tek kalan simetrik olasılık

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herhangi iki ve son durumuna bağlı tek kalan simetrik olasılık

$fz \overset{DSST}{S}_{j_i}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

$fz \overset{DSST}{S}_{j_i,0}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

$fz \overset{DSST}{S}_{j_i,D}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

${}^0 \overset{DSST}{fz \Rightarrow} j_i$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

${}^0 \overset{DSST}{fz \Rightarrow} j_i,0$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

${}^0 \overset{DSST}{fz \Rightarrow} j_i,D$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

$f_Z S_{j_s^{sa}}^{DSST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin durumuna bağlı tek kalan düzgün simetrik olasılık

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$fzS_{j_{ik}, j^{sa}, D}^{DSST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu

bağımlı simetrisinin herhangi iki durumuna bağlı tek kalan düzgün simetrik olasılık

$fzS_{j_s, j_{ik}, j^{sa}}^{DSST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

$fzS_{j_s, j_{ik}, j^{sa}, 0}^{DSST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

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bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

${}^0S_{j_s, j_{ik}, j_i, 0}^{DSST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

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$f_z S_{j_i}^{DOST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık

$f_z S_{j_i, 0}^{DOST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık

$f_z S_{j_i, D}^{DOST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık

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$f_z S_{j^{sa}}^{DOST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu

simetrisinin durumuna bağlı tek kalan düzgün olmayan simetrik olasılık

$f_Z S_{j_s^{sa},0}^{DOST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin durumuna bağlı tek kalan düzgün olmayan simetrik olasılık

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

$fz,0S_{j_s,j_{ik},j^{sa},j_i,0}^{DOST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık

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E2

BAĞIMLI ve BİR BAĞIMSIZ OLASILIKLI FARKLI DİZİLİMSİZ DAĞILIMLAR

Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Dağılımlar

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

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

Farklı dizilimsiz dağılımlar, dağılımın ilk durumuyla başlayan (bunun yerine farklı dizilimsiz dağılımlarda simetrisinin ilk durumuyla başlayan dağılımlar), dağılımın ilk durumu hariçinde dağılımın herhangi bir durumuyla başlayan dağılımlar (bunun yerine farklı dizilimsiz dağılımlarda simetride bulunmayan bir durumla başlayan dağılımlar) ve dağılımın ilk durumu hariçinde ilk dağılımının başladığı farklı ikinci durumla başlayıp simetrisinin 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 olmasına (bağımsız olay sayısı) dağılımla bağımlı ve bir bağımsız olasılıklı dağılımlar elde edilir. Bağımlı dağılım farklı dizilimsiz dağılımlarda oluşturduğunda, bu dağılımlara bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlar denir. 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 duruma 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'nun Çizim 1'de 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 adların altına 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" 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 sınıra sınır değerleri, simetrinin küçükten-büyük 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 düzenleneren küçükten-büyük sıralanan dağılımlar için de simetrik olasılık eşitlikleri elde edilecektir.

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

**SİMETRİDEN SEÇİLEN DÖRT DURUMA GÖRE TEK KALAN DÜZGÜN OLMAYAN
SİMETRİK OLASILIK**

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

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

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

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

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z^S(j_s, j_{ik}, j_{sa}^{ik}) = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

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

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+k_2+k_3-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-k_3}$$

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

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

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot$$

$$\begin{aligned}
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{l_i!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \\
& \sum_{j_s = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(l_{sa} - 1)} \sum_{j_i = j_{sa} + 1}^{l_i - l + 1} \sum_{j_k = l_{sa} + j_{sa} - l - s + 2}^{(j_s - j_{sa}^{ik} + 1)} \\
& \sum_{n + \mathbb{k}_1}^{(n_i - j_s - 1)} \sum_{(n_{is} = n + \mathbb{k}_1 - j_s + 1)}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

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

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

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

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

$$\sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=...+j_s-j_{ik}-l_{k_1})}^{(n_{ik}=...+j_s-j_{ik}-l_{k_1})}$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}-l_{k_2})}^{()} \sum_{(n_{sa}+j^{sa}-j_i-l_{k_3})}^{()}$$

$$\frac{(n_i + j_i + ... - j^{sa} - 2 \cdot ... - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_{sa} - l_{k_2} - l_{k_3})! \cdot (n_{sa} + j^{sa} - j_i - l_{k_3})!}$$

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

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

$$D \geq n < n \wedge l_i = l \wedge l_i = D + s - ... \wedge$$

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

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

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

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

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

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l \wedge$$

$$l_{k_2}: z = 3 \wedge l_{k_2} = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

$$\begin{aligned}
fzS_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
&\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{l_{ik}+j_{sa}^{ik}-l-s+1} \sum_{j_i=s+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
&\sum_{n_i=n+l_{k_1}}^n \sum_{(n_{is}=n+l_{k_1}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(j_i=j_{ik}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}-j_s-j_i-l_{k_3})} \\
&\sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_3})} \sum_{n_s=n-j_i+l_{k_3}}^{(n_s-n_{is}-1)!} \\
&\frac{(n_s-n_{is}-1)!}{(j_s-j^{sa}-2)! \cdot (n_{is}-j_s+1)!} \cdot \\
&\frac{(n_{is}-j_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \cdot \\
&\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
&\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
&\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
&\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
&\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
&\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
&\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
&\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=j_{sa}+1)}^{l_i-l+1} \sum_{j_i=l_{ik}+j_{sa}^{ik}-l-s+2}^{l_i-l+1}
\end{aligned}$$

$$\begin{aligned}
 & \sum_{n_i=n+l}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_i - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l} \sum_{\substack{(\quad) \\ (j_s=j_{ik}-j_{sa}^k+1)}} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^k-j_{sa}} \sum_{\substack{(\quad) \\ (j^{sa}=j_i+j_{sa}-s)}} \sum_{\substack{l_{ik}+j_{sa}^k-l-s+1 \\ j_i=s+1}} \\
 & \sum_{n_i=n+l}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{\substack{(\quad) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}
 \end{aligned}$$

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$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

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

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

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

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

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

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{l_s+s-l} \sum_{j_i=s+1}^{n_i-j_s+1} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

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

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

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

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

$$\frac{(l_i + j_{sa} - l - 1)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l - 1)!}$$

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

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

$$\sum_{j_{ik}=j_{sa}+1}^{j_{ik}=l_s+l-1} \sum_{j_{sa}=j_{sa}+1}^{j_{sa}=l_s+l-1} \sum_{j_i=l_s+l-1}^{j_i=l_s+l-1}$$

$$\sum_{j_{ik}=n+l}^{j_{ik}=n+l} \sum_{n_{is}=n+l-j_s+1}^{n_{is}=n+l-j_s+1} \sum_{n_{ik}=n+l_2+l_3-j_{ik}+1}^{n_{ik}=n+l_2+l_3-j_{ik}+1}$$

$$\sum_{n_{sa}=n+l_3-j^{sa}+1}^{n_{sa}=n+l_3-j^{sa}+1} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1}$$

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

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

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

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

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

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{(j_s)} \sum_{(j_s=j_{sa}+1)}^{(j_{sa}+1)} \sum_{(j_{sa}=j_{sa}-s)}^{(j_{sa}-s)} \sum_{(j_i=s+1)}^{(j_i=s+1)} \sum_{(j_{ik}=j_{sa}+j_{ik}-j_{sa})}^{(j_{sa}+j_{ik}-j_{sa})} \sum_{(n_i=n+l_k)}^{(n_i=n+l_k-j_{ik})} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-l_{k1})}^{(n_{ik}=n_{is}+j_s-j_{ik}-l_{k1})} \sum_{(n_i=n+l_k-j_{ik}-l_{k2})}^{(n_i=n+l_k-j_{ik}-l_{k2})} \sum_{(n_s=n_{sa}+j^{sa}-j_i-l_{k3})}^{(n_s=n_{sa}+j^{sa}-j_i-l_{k3})} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - l_{k1} - l_{k2} - l_{k3})!}{(n - n - l_{k1} - l_{k2} - l_{k3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l \neq l \wedge l \leq D + s - n \wedge$$

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

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

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

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

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

$$s: \{j_{sa}^s, l_{k1}, j_{sa}^{ik}, \dots, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

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

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

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

$$\sum_{(n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(\quad)} \sum_{(j^{sa}+1)}^{n_{sa}+j^{sa}-\mathbb{k}_3}$$

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

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

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

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

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

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

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

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

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-lk_2)}^{(\)} \sum_{n_s=n_{sa}+j_i-j_{lk_3}}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - lk_1 - lk_2 - lk_3)!}{(n_i - n - lk_1 - lk_2 - lk_3)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

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

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

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n$

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

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

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

$D \geq n < n \wedge I = j_s > 0 \wedge$

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

$s: \{ \dots, lk_1, j_{sa}^{ik}, \dots, lk_2, j_{sa}, \dots, lk_3, j_s \} \wedge$

$j_s \geq 6 \wedge j_s = s + lk \wedge$

$lk_z: z = 3 \wedge lk_1 + lk_2 + lk_3 \Rightarrow$

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

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

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{i_s}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1} \\
& \sum_{(n_{s_a}=\mathbf{n}+\mathbb{k}_3-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{s_a}+j^{s_a}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
& \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
& \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j^{s_a} - n_s - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_{i_s} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{s_a} - l_{s_a} - s)!}{(j^{s_a} - l_i - j_i - l_{s_a})! \cdot (j_i + j_{s_a} - j^{s_a} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\sum_{k=l} \sum_{(j_s=j_{i_k}-j_{s_a}^k+1)}^{()}$$

$$\sum_{j_{i_k}=j^{s_a}+j_{s_a}^k-j_{s_a}}^{(l_{i_k}+j_{s_a}^k-l-s+1)} \sum_{(j^{s_a}=j_{s_a}+1)} \sum_{j_i=j^{s_a}+s-j_{s_a}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{i_s}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=\mathbf{n}_{i_s}+j_s-j_{i_k}-\mathbb{k}_1}$$

$$\sum_{(n_{s_a}=\mathbf{n}_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2)}^{()} \sum_{n_s=\mathbf{n}_{s_a}+j^{s_a}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

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

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

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

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

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

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=j_{sa}+1)}^{l_i-l+1} \sum_{j_i=j^{sa}+s-j_{sa}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

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

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

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

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

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

$$(D - l_i)!$$

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

$$\sum_{l=1}^{\dots} \sum_{j_s=j_{ik}-j_{sa}+1}^{\dots}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\dots)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\dots}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

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

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

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

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

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

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

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{\binom{l}{k}} \binom{j_s - j_{ik} - 1}{k} \binom{l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1}{j_{ik} - j_s - 1} \binom{l_i - l + 1}{j_{sa} - j_{sa} - j_{ik} - j_i} \binom{n - (j_i - j_s + 1)}{n + k} \binom{n_{is} + j_s - j_{ik} - k_1}{n_{is} = n + k_1 + 1} \binom{n_{ik} + j_{sa} - j_{ik} - k_2}{n_{ik} = n + k_2 + k_3 - j_{ik} + 1} \binom{n_{sa} + j_{sa} - j_i - k_3}{n_{sa} = n + k_3 - j_{sa} + 1} \binom{n_s - 1}{n_s = n - j_i + 1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_{ik}=j_{sa}^{ik}+s-j_{sa}}^{(\cdot)} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s}^{(\cdot)} \sum_{(n_{ik}+j_{sa}^{ik}-l_{sa}-l_{k_2})}^{(\cdot)} \sum_{(n_{ik}+j_{sa}^{ik}-l_{sa}-l_{k_2}-j_i-l_{k_3})}^{(\cdot)} \frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 0 \wedge l_i \leq D + s - 1 \wedge$$

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

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

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

$$D \geq n < n \wedge l = l_k > 0 \wedge$$

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

$$s: \{j_{sa}^s, l_{k_1}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 0 \wedge s = s + l_k \wedge$$

$$l_{k_z}: z = 3 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

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

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{lk}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
& \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+lk_2+lk_3-j_i}^{n_{is}+j_s-j_{ik}-lk_1} \\
& \sum_{(n_{sa}=n+lk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-lk_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i} \\
& \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
& \frac{(n_{is}-n_{ik}+1)!}{(j_{ik}-j_s+1)!(n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-lk_2-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-lk_2)!} \cdot \\
& \frac{(n_{sa}-n_s-lk_3-1)!}{(j_i-j^{sa}-1)!(n_{is}+j^{sa}-n_s-j_i-lk_3)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot
\end{aligned}$$

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

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

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-lk_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot \frac{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}{(l_s - l - 1)! \cdot (j_s - l + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

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

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

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

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

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

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

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

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l - 1)!}{(l_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - l_s - s)! \cdot (j_i + l_i - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{l_s} \sum_{(j_s=j_{ik}-j_{sa}+1)}^{(j_s)} \\
& \sum_{k=j_{sa}^{lk}+1}^{l_s+j_{sa}^{lk}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})}^{(j^{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j_i)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(j^{sa})} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(j^{sa})} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

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

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

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

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} & \sum_{i_k=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l-j_{sa}^{ik})} \sum_{i_i=j_{sa}^{ik}+j_{sa}-j_{sa}}^{(l_{sa}-l-j_{sa}^{ik})} \sum_{i_l=j^{sa}+s-j_{sa}}^{(l_{sa}-l-j_{sa}^{ik})} \\ & \sum_{i_s=n+k}^{(n_i-j_s)} \sum_{i_{ik}=n+k_2+k_3-j_{ik}+1}^{(n_{is}+j_s-j_{ik}-k_1)} \\ & \sum_{i_{ik}=n+k}^{(n_{is}=n+k-j_s+1)} \sum_{i_{ik}=n+k_2+k_3-j_{ik}+1}^{(n_{is}+j_s-j_{ik}-k_1)} \\ & \sum_{i_{sa}=n+k_3-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{i_s=n-j_i+1}^{(n_{sa}+j^{sa}-j_i-k_3)} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \end{aligned}$$

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

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

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

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

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=j_s-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}-k_2)}^{(n_{sa}=n_{ik}-j^{sa}-k_2)} \sum_{(n_{sa}+j^{sa}-j_i-k_3)}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot k_1 - k_2 - k_3)!}{(n_i - k_1 - k_2 - k_3)! \cdot (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

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

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

$$D \geq n < n \wedge l = l \wedge l_i = D + s - 1 \wedge$$

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

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

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

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_2: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned}
 f_{zS} S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \\
 &\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_s)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(j_s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_i-l+1)} \\
 &\sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{ik_2}-j_{ik}+1}^{(n_{is}+j_s-j_{ik}-l_{k_1})} \\
 &\frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{is}+j_s-j_{ik}-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j_{ik}-1)! \cdot (n_s=n-j_i+l_{k_2})!} \cdot \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \\
 &\frac{(n_{is}-j_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{ik}-j_{sa}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \\
 &\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \\
 &\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_s)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(j_s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_i-l+1)}
 \end{aligned}$$

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

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

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

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

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

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

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

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

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

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$

$s \geq 6 \wedge s = \mathbb{k} + \mathbb{k}$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 = \mathbb{k}$

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\begin{aligned}
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s - 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_{is} - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n + j_i - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_i - l_{sa} - s)!}{(j^{sa} - l_s - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{is}=n+\mathbb{k}_1-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}
\end{aligned}$$

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

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

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

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

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

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 + k_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - k_3}$$

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

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

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

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

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

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

$$\frac{(l_i + j_{sa} - l - 1)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l - 1)!}$$

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

$$\sum_{l=1}^{\infty} \sum_{j_s=j_{ik}-j_{sa}+1}^{\infty}$$

$$\sum_{j_s=j_{sa}+1}^{l-1} \sum_{j_i=l_{sa}+s-l-j_{sa}+2}^{l_i-l+1}$$

$$\sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

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

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

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

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

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

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{(j_s)} \sum_{(j_s=j_{sa}+j_{ik}+1)}^{(j_s)} \sum_{(j_{sa}=j_i+j_{sa})}^{(j_{sa})} \sum_{(j_i=l_i+n-D)}^{(j_i)} \sum_{(n_i=n+l_{sa}+j_{ik}-l_{sa})}^{(n)} \sum_{(n_i=n+l_{sa}-j_{ik})}^{(n)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1})}^{(n)} \sum_{(n_i=n_{ik}+j_{ik}-l_{k_2})}^{(n)} \sum_{(n_s=n_{sa}+j^{sa}-j_i-l_{k_3})}^{(n)} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

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

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

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

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

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

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

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{+j_s-j_{ik}-\mathbb{k}_1}$$

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

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

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

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

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

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

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

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

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

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$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=l_{ik}+s-l-j_{sa}^{ik}+2}^{l_i-l+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_i}^{n_{is}+j_s-j_{ik}-k_1} \\
& \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
& \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \\
& \frac{(n_{sa}-j_s-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot
\end{aligned}$$

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

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

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_1: z = 3 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=l_i+n-D}^{l_s+s-l} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s + \dots - n - 1)!}{(n_s + \dots - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + \dots - l_{sa})}{(j^{sa} + l_i + \dots - l_{sa}) \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + \dots - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=j_{sa}+1)}^{l_i-l+1} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
\end{aligned}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

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

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

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

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

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

$$\sum_{j_i=n+\mathbb{k}_1} \binom{()}{n_{is}=n+\mathbb{k}_1-j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n - j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

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

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

$$D \geq n < l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{l=1}^{(j_s=j_{ik}+j_{sa}^{ik}+1)} \sum_{j_i=l+n-D}^{(l_i+n_{is}-D-s-1)} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}}^{(n_{ik}+1)} \sum_{n_i=n+\mathbb{k}}^{(n_{is}+\mathbb{k}-j_s+1)} \sum_{n_{sa}=n_{sa}+j_{sa}^{ik}-\mathbb{k}_2}^{(n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3)} \sum_{n_s=n-j_i+1}^{(n_{sa}-\mathbb{k}_3-j_{sa}+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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

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

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}-l_{k_1}}^{(n_{is}+j_s-j_{ik}-l_{k_1})} \sum_{(n_{ik}+j_{ik}-j^{sa})}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{(n_{sa}=n+l_{k_3}-j_i-1)}^{(n_{sa}+j_s-j_i-l_{k_3})} \sum_{(n_s=n-j_i+1)}^{(n_s+n-j_i+1)}$$

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

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

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!}$$

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

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

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

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

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - 1)! \cdot (l - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i - l_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

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

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

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

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

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

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

$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n-D}^{l_i-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\begin{aligned}
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - \mathbb{k}_2)!} \\
& \frac{(n_{sa} - n_{sa} - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \\
& \frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!} \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
& \frac{(l_i + j_{ik} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{l_i-l+1} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l - 1)!}{(l_s - l + 1)! \cdot (j_s - l - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - l_s - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}+1)}^{()} \\
& \sum_{j_{ik}=j^{sa}+j_i-j_{sa}}^{(j_{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j_{sa}=l_i+n+j_{sa}-D-s)} \\
& \sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{is}=n+\mathbb{k}_1-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned} S_{j_s, j_{ik}, j_{sa}^i} &= \sum_{k=1}^{\binom{()}{}} (j_s = j_{ik} - j_{sa}^{ik} + 1) \\ & \sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{n+j_{sa}-s-1} \sum_{a=j_{sa}+1}^{l_i-l+1} \sum_{j_i=l_i+n-D} \\ & \sum_{j_s=1}^{n+j_{sa}-s+1} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(j_s)} \sum_{(j_s=j_{sa}+1)}^{(j_s)} \sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+l-1)} \sum_{(j_i=j^{sa}+s-j_{sa})}^{(j_i)} \sum_{(n_i=n+l_k)}^{(n)} \sum_{(n_{is}=n+l_k-j_s)}^{(n_{is})} \sum_{(n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1)}^{(n_{ik})} \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{sa})} \sum_{(n_s=n-j_i+1)}^{(n_s)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
\end{aligned}$$

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

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

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

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

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{lk_1} - l_{k_1} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (j_i + j_{sa} - s - l_{k_1} - l_{k_2} - l_{k_3})!}$$

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

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

$$D \geq n < n \wedge l \neq i \wedge l_s = D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq n - a + j_{sa}^{ik} - j_{sa} \wedge$$

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

$$l_{k_1} - j_{sa}^{lk} + 1 \leq l_{sa} \wedge l_{sa} + j_{sa}^{lk} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_i \leq D - l_s + s - l_{k_1} - 1 \wedge$$

$$\geq n < n \wedge l = l_k > 0$$

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

$$s: \{j_{sa}^s, l_{k_1}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$> 6 \wedge s + l_k \wedge$$

$$l_k: z = 3 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

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

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \binom{(\quad)}{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_i}^{n_{is}+j_s-j_{ik}-k_1} \\
& \sum_{(n_{sa}=n+k_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i-1} \\
& \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
& \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{sa}-n_{sa}-j_{sa}-k_2)!} \cdot \\
& \frac{(n_{sa}-k_3-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-k_3)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
\end{aligned}$$

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

$$\begin{aligned}
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \binom{(\quad)}{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}^{l_i-l+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}
\end{aligned}$$

$$\begin{aligned}
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_{is} - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n + j_i - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_i - l_{sa} - s)!}{(j^{sa} - l_s - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{is}=n+\mathbb{k}_2-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}
\end{aligned}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

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

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

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

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

$$\frac{(l_i + j_{sa} - l - 1)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l - 1)!}$$

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

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

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

$$\sum_{n+l}^{n+l} \sum_{n_{is}=n+l-j_s+1}^{n_{is}=n+l-j_s+1} \sum_{n_{ik}=n+l_2+l_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_1}$$

$$\sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3}$$

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

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

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

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

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

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

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

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

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

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

$$\sum_{n_i=n+l_k}^n \sum_{n_i=n+l_k-j_{sa}^{lk}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}$$

$$\sum_{n_{ik}+j_{ik}-l_{k2}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k3}}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - l_{k1} - l_{k2} - l_{k3})!}{(n - n - l_{k1} - l_{k2} - l_{k3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

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

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

$$D \geq n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

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

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

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

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

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

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

$$s: \{j_{sa}^s, l_{k1}, j_{sa}^{ik}, \dots, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i)}^{+j_s-j_{ik}-\mathbb{k}_1}$$

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

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

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

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

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

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

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

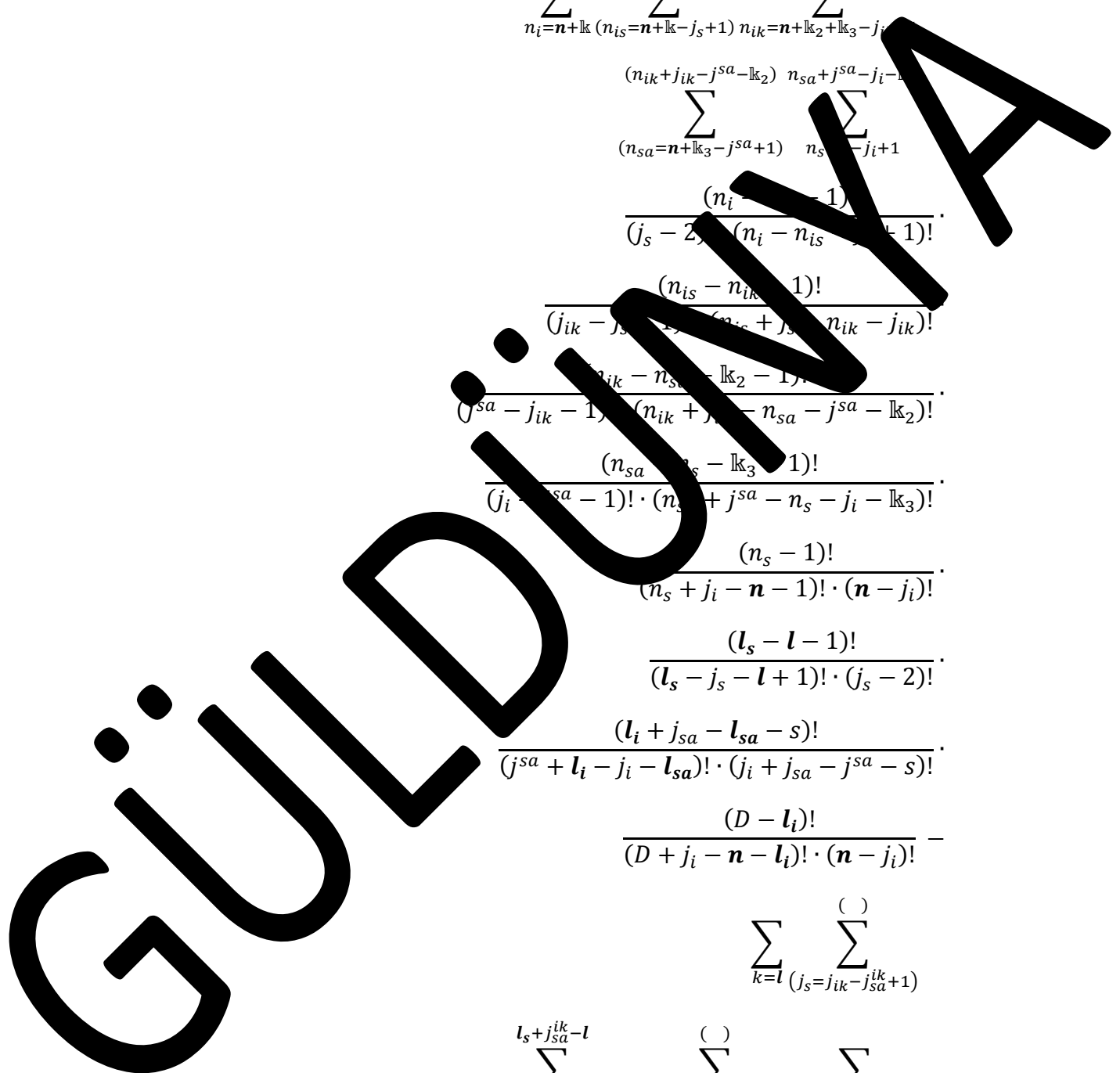
$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

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$$\begin{aligned}
 & \sum_{j_{ik} = l_i + n + j_{sa}^{lk} - D - s}^{l_s + j_{sa}^{lk} - l} \binom{(\quad)}{\quad} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 + k_3 - j_i}^{n_{is} + j_s - j_{ik} - k_1} \\
 & \sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s = j_i + 1}^{n_{sa} + j^{sa} - j_i - 1} \\
 & \frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_i - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - k_3 - 1)!}{(j_i - n_{sa} - 1)! \cdot (n_{is} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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

$$\begin{aligned}
 & \sum_{j_{ik} = l_i + n + j_{sa}^{lk} - D - s}^{l_s + j_{sa}^{lk} - l} \binom{(\quad)}{\quad} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}
 \end{aligned}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$k_1 : z = 3 \wedge k_1 = k_1 + k_2 + k_3 \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{l_i-l+1} \sum_{j_i=l_i+n-D} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s + n - 1)!}{(n_s + n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(n - l - 1)!}{(n - l - 1)! \cdot (j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + n - l_{sa} - 1)!}{(j^{sa} + l_i - l_{sa} - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(l_{sa} - l - j_{sa} + 2)} \sum_{(j_s = l_i + n - D - s + 1)} \\
& \sum_{j_{ik} = j_s + j_{sa}^{lk} - 1}^{()} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{lk})} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 1} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
\end{aligned}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

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

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

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

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

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n - j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

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

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

$$D \geq n < n - l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{i+n-D-s} \sum_{l=2}^{i+n-D-s} \sum_{j_{ik}=j_s+j_{sa}^{ik}}^{(n_{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}^{ik}}^{(n_{sa}+1)} \sum_{j_i=l_i+n-D}^{(n_i+1)} \sum_{n_i=n+\mathbb{k}}^{(n_i+1)} \sum_{n_{sa}=n+\mathbb{k}-j_s}^{(n_{sa}+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_{ik}+1)} \sum_{n_{sa}=n+\mathbb{k}_3-j_{sa}+1}^{(n_{sa}+1)} \sum_{n_s=n-j_i+1}^{(n_s+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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

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

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

$$\frac{(n_{ik}+j_{ik}-j_{sa}^{ik}+j_{sa}-j_{sa}^{ik}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j_{sa}^{ik}-1)! \cdot (n_s=n-j_i+l_{k_3}-j_{sa}^{ik}-1)!}$$

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

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

$$\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}+1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j_{sa}-l_{k_2})!}$$

$$\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-l_{k_3})!}$$

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

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

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

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

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

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

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$$\sum_{n_i=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_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{(l_s - l - 1)! \cdot (l - 2)!}{(l_s - j_s - 1)! \cdot (l - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i - l_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

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

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

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

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

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

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

$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\begin{aligned}
& \sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \\
& \frac{(n_{ik} - n_{sa} - l_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - l_2)!} \\
& \frac{(n_{sa} - n_{is} - l_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_3)!} \\
& \frac{(n_s - 1)!}{(n_s + j_i - 1)!} \cdot (n - j_i)! \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
& \frac{(l_i + j_s - l_{sa} - s)!}{(j^{sa} - l_s - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
& \sum_{n_i=n+l_3}^n \sum_{(n_{is}=n+l_3-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_2+l_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_1} \\
& \sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - \dots)! \cdot (j_i + \dots - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_s - l + 1)} \\
& \sum_{j_{ik} = \dots + j_{sa}^{lk} - 1}^{(j_{ik} + j_{sa}^{lk} - 1)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{lk})}^{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{lk})} \sum_{j_i = j^{sa} + s - j_{sa}}^{(j_i = j^{sa} + s - j_{sa})} \\
& \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{is} = n + \mathbb{k}_1 - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s + 1)} \\
& \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{(n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3)} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz \cdot \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_s=j_{ik}-j_{sa}^{ik}+1} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_i=l_i+n-D}^{j_i=l_i+n-D} \sum_{j_{sa}=j_{sa}+1}^{j_{sa}=j_{sa}+1} \sum_{j_i=l_i+n-D}^{j_i=l_i+n-D} \sum_{n_{is}=n+k-j_s+1}^{n_{is}=n+k-j_s+1} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{ik}=n+k_2+k_3-j_{ik}+1} \sum_{n_{sa}=n+k_3-j^{sa}+1}^{n_{sa}=n+k_3-j^{sa}+1} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{j_s} \binom{j_s - k}{j_s - j_{ik} - j_{sa}} \cdot \\
& \sum_{j_{ik}=j^{sa} - k - j_{sa}}^{j_s - k} \binom{j_s - k}{j_s - j_{ik} - j_{sa}} \cdot \binom{j_s - k - j_{sa} + 1}{j_s - k - j_{sa} - s} \cdot \binom{j_s - k - j_{sa} + 1}{j_s - k - j_{sa} - s} \cdot \\
& \sum_{n=n+k}^n \binom{n - j_s + 1}{n_{is} = n + k} \sum_{j_s = j_s + 1} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1} \\
& \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2} \sum_{n_s = n_{sa} + j^{sa} - j_i - k_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D > n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

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

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{l=1}^{(j_s=j_{ik}+j_{sa}+1)} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}}^{(n_i-1)} \sum_{j_i=l_i+n-D}^{(n_i-1)} \sum_{n_i=n+\mathbb{k}}^{(n_{is}+l-j_s+1)} \sum_{n_{sa}=n_{sa}+j_{sa}^{ik}}^{(n_{sa}+j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{(n_{sa}-\mathbb{k}_3-j_{sa}+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{(\cdot)} \sum_{(n_{sa}+j_{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

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

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

$D \geq n < n \wedge l \neq i \wedge l_s \geq D - n + 1 \wedge$

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

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

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

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

$D + s - n < l_i \leq D + j_{sa} + s - n - 1 \wedge$

$D \geq n < n \wedge l \neq i \wedge l_s \geq D - n + 1 \wedge$

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

$\{j_s^s, l_{k_1}, l_{k_2}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + l_{k_1} \wedge$

$l_{k_2}: z = 3 \wedge l_{k_2} = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$

$$\begin{aligned}
 f_{zS} S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)} \\
 &\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(l_s + j_{sa} - l)} \sum_{(j^{sa} = j_{sa} + 1)}^{l_i - l + 1} \sum_{j_i = l_i + n}^{(\quad)} \\
 &\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_{sa} = n + k_3 - j_i + 1)}^{n_{ik} + j_{ik} - j^{sa} - j_{sa} + j_i - k_3} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \\
 &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 &\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

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

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

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

$D + l_s + s - n - l_i + 1 \leq l \leq i - 1$

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

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

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

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

$D \geq n < n \wedge l = i > 0$

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

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

$s \geq 6, j_{sa}^s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

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

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

$$\sum_{n_i=n+l}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\ \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\ \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\ \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\ \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

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

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

$$\sum_{n_i=n+l}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{\substack{() \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

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

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

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 =$$

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

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

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - l_s - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(l_{sa} - l - j_{sa} + 2)} \sum_{(j_s = l_i + n - D - s + 1)} \\
& \sum_{j_{ik} = n + j_{sa} - j_s - 1}^{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}^{(j_i = j^{sa} + s - j_{sa})} \\
& \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{is} = n + \mathbb{k}_1 - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(j_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\sum_{l=1}^{(l_{ik} - j_{sa}^{ik} + 2)} \sum_{(j_s=2)}^{(j_s - j_{sa}^{ik} + 1)} \sum_{(j_{ik}=j_s + j_{sa}^{ik} - 1)}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_i=l_i + n - D)}^{(l_i - l + 1)} \sum_{(n_{is}=n+k-j_s+1)}^{(n_i - j_s + 1)} \sum_{(n_{ik}=n+k_2+k_3-j_{ik}+1)}^{(n_{is} + j_s - j_{ik} - k_1)} \sum_{(n_{sa}=n+k_3-j_{sa}+1)}^{(n_{ik} + j_{ik} - j_{sa} - k_2)} \sum_{(n_s=n-j_i+1)}^{(n_{sa} + j_{sa} - j_i - k_3)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_s=l_i+n-D-s}^{(l_{ik}-l-1)+2} \sum_{j_{ik}=j_s}^{(j_{ik}-1) \cdot (j^{sa} + j_{sa} - j_{sa}^{ik})} \sum_{j_{sa}=j_{ik}-1}^{(j_{sa}-j_s+1)} \sum_{n=n+\mathbb{k}}^{(n_{is}=n+j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

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

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

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

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

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

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_i+j_{sa}}^{(\cdot)} \sum_{j_i=1}^{l_{ik}-\mathbb{k}-l-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}}$$

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

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

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

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!}$$

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

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

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

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

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{ik}+j_{sa}^{ik}-l-s}^{l_i-l+1} \\
 & \sum_{n_i=n+l}^n \sum_{(n_{is}=n+l-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l-k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j_{sa}-j_i-k_3)!}{(n_{sa}=n+l-k_3-j_{ik}+1)! \cdot (n_s=n-j_i+1)!} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{ik} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-l-s+1}
 \end{aligned}$$

$$\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_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{(l_s - l - j_i - j_{sa} - j^{sa} - 1)! \cdot (l_s - j_s - 1)! \cdot (l_s - 2)!}{(l_s - j_s - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - j_{ik} - j_{sa} - l_i)! \cdot (n - j_i - j_{sa} - j^{sa} - l_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

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

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

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

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

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

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$

$s \geq 6 \wedge s = \mathbb{k} + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots \wedge$

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\begin{aligned}
& \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - k_2)!} \cdot \\
& \frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot (n - j_i)! \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

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

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

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

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

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l - 1)!}{(l_s - j_i - l + 1)! \cdot (j_i - l + 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\cdot)} \\
& \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(\cdot)} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\cdot)} \sum_{j_i = s+1}^{l_s + s - l} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

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

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

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

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

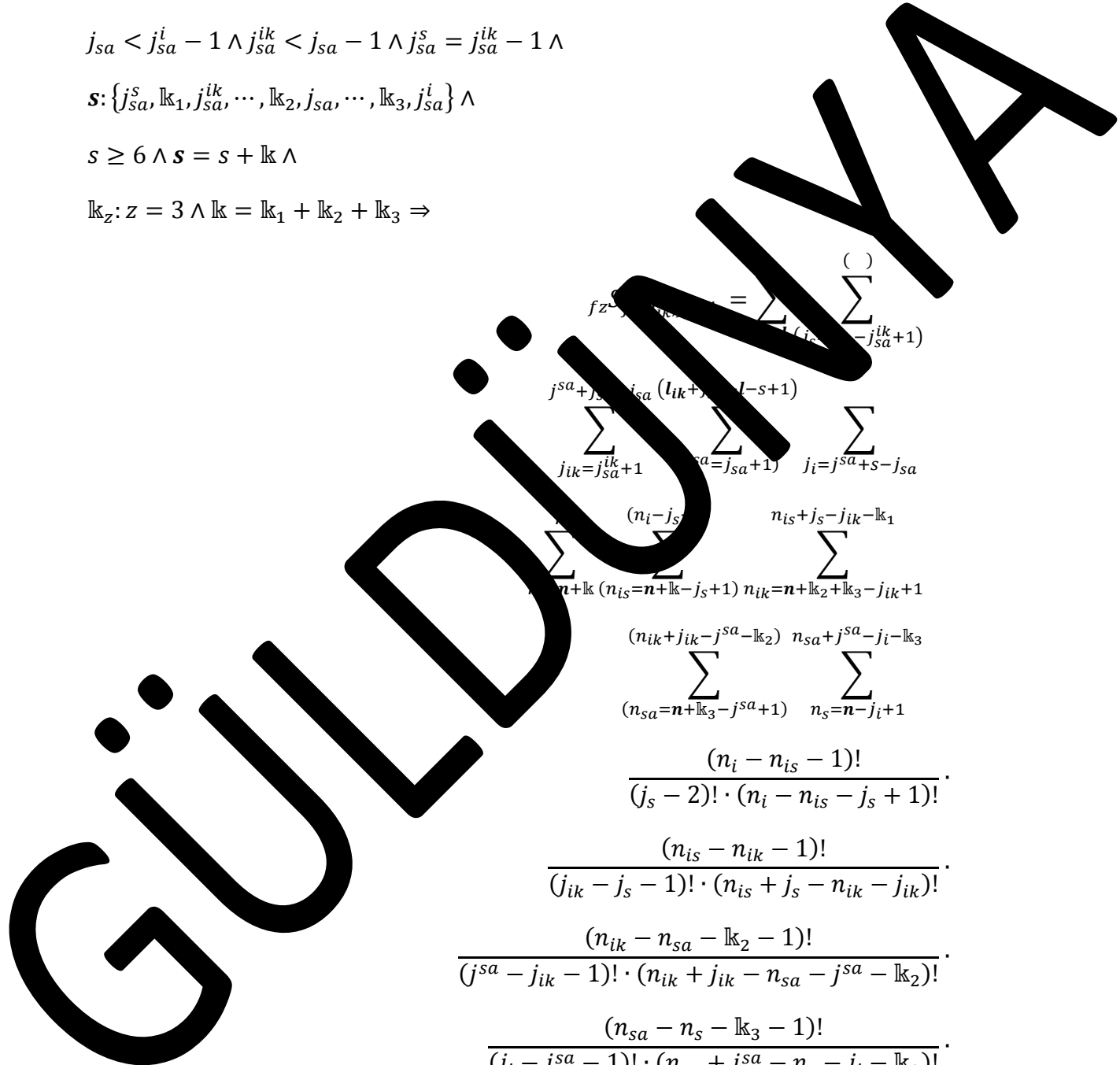
$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^{(s)} = \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}-j_{sa}^{ik}} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-s+1} \sum_{j_i=j^{sa}+s-j_{sa}}^{(n_i-j_s)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_{sa}=n+k_3-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$



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

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

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

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n_{is} - k - j_s)}^{(n_i - j_s + 1)} \sum_{(n_{is} + j_s - j_{ik} - k_1)}^{()}$$

$$\sum_{(n_{ik} + j_{ik} - j^{sa} - k_2)}^{()} \sum_{(n_{sa} = j_i - k_3)}^{()}$$

$$\sum_{(n_{sa} = n_{sa} + k_3 - j^{sa})}^{()} \sum_{n_s = n - j_i + 1}^{()}$$

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

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

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

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

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

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

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

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

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

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

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s)!}$$

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

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

$$D \geq n < n \wedge l \neq i \wedge l_i \leq n + s - n \wedge$$

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

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

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

$$D \geq n < n \wedge l = l_{k_1} + l_{k_2} + l_{k_3} \wedge$$

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

$$s: \{j_{sa}^s, j_{sa}^{ik}, \dots, j_{sa}^a, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq n + l_{k_1} \wedge$$

$$l_{k_3} = n - l_{k_1} - l_{k_2} \Rightarrow$$

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

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
& \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
& \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
& \frac{(n_{sa}-l_{k_3}-1)!}{(j_i-n_{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
\end{aligned}$$

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

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}
\end{aligned}$$

$$\begin{aligned}
& \sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - l_2)!} \cdot \\
& \frac{(n_{sa} - n_{sa} - l_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - 1)!} \cdot (n - j_i)! \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+l_1}^n \sum_{(n_{is}=n+l_1-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_3}^{(\cdot)} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - l_1 - l_2 - l_3)!}{(n_i - n - l_1 - l_2 - l_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}
\end{aligned}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

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

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

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

$$D \geq n < n \wedge I = k > 0 \wedge$$

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} & \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\ & \sum_{j_{ik}=j_{sa}^{ik}+1}^{ik-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\ & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\ & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_{ik}=j_{sa}^{lk}+1}^{l_{ik}-1} \sum_{j_{ik}=j_{sa}^{lk}+1}^{l_{ik}-1} \sum_{j_i=j^{sa}+s-j_{sa}}^{j_{sa}^{lk}+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(n_{sa})} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(n_s)} \\
& \frac{(n_{sa} + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_{sa} + j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$j_i \geq n - l_i \wedge l_i \neq j_i \wedge l_i \leq D + s - n \wedge$$

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

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

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

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

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

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{l=1}^{(j_s=j_{ik}+j_{sa}^{ik}+1)} \sum_{j_{ik}=j_{sa}^{ik}}^{l_s+j_{sa}^{ik}-l} \sum_{j_{sa}=j_{sa}^{ik}}^{(l_{sa}+1)} \sum_{j_i=j_{sa}+s-j_{sa}}^{(n_i-1)-\mathbb{k}_1} \sum_{n_i=n+\mathbb{k}}^{(n_{is}+l_{sa}+l_{sa}^{ik}-j_s+1)-\mathbb{k}_1} \sum_{n_{ik}=n_{sa}+j_{sa}-\mathbb{k}_2}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \sum_{n_s=n-j_i+1}^{(n_{sa}-\mathbb{k}_3-j_{sa}+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_{ik}=j_{sa}^{ik}+s-j_{sa}}^{(\cdot)} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s}^{(\cdot)} \sum_{(n_{ik}+j_{sa}^{ik}-l_k_2) \leq n_{is}}^{(\cdot)} \sum_{n_{ik}+j_{sa}^{ik}-l_k_2}^{(\cdot)} \sum_{n_{ik}+j_{sa}^{ik}-l_k_2}^{(\cdot)} \frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s - l_k_2 - l_k_3)!}{(n_i - n - l_k_2 - l_k_3)! \cdot (n + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 0 \wedge l_i \leq D + s - 1 \wedge$$

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

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

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

$$D \geq n < n \wedge l = l_k > 0 \wedge$$

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

$$s: \{j_{sa}^s, l_{k_1}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 0 \wedge s = s + l_k \wedge$$

$$l_{k_z}: z = 3 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

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

$$\begin{aligned}
& \sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(l_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa+s}-j_{sa}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_3-j_{ik}-1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
& \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
& \frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
& \frac{(n_{is}-n_{ik}+1)!}{(j_{ik}-j_s+1) \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-l_{k_2}-1)}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
& \frac{(n_{sa}-n_s-l_{k_3}+1)!}{(j_i-n_{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
& \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{sa}+j_{sa}^{lk}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{lk}-j_{ik}-j_{sa})!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot
\end{aligned}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

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

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

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

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

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

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

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

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l - 1)!}{(l_s - j_i - l + 1)! \cdot (l - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l)!}{(D + j_i - n - l)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=j_s + j_{sa}^{ik} - 1}^{()} \sum_{(j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i=j^{sa} + s - j_{sa}}^{()} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned} S_{j_s, j_{ik}, j_{sa}^i} &= \sum_{k=1}^{()} (j_s = j_{ik} - j_{sa}^{ik} + 1) \\ &\sum_{j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} (j^{sa}) \sum_{j_i+j_{sa}-s}^{()} l_{ik+s-l-j_{sa}^{ik}+1} \\ &\sum_{n_{i_s}+1}^{n_{i_s}+j_s+1} (n_{i_s} = n + \mathbb{k} - j_s + 1) \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\ &\sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ &\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{sa}^{ik}+1)}^{(\quad)} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j_{sa}=l_i+j_{sa}-s)}^{(\quad)} \sum_{(j_{sa}+s-l-j_{sa}^{ik}+2)}^{(\quad)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{sa}=n+l_k-j_s+l_{sa}^{ik}-l_{ik}+1)}^{(n_{sa}+1)} \sum_{(n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1)}^{(n_{ik}+1)} \\
& \sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{ik}+j_{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-l_{k_3}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{(\cdot)} \sum_{(n_{sa}+j_{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

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

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

$$D \geq n < n \wedge l \neq i \wedge l_s \geq D - n + 1 \wedge$$

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

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

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

$$D + j_{sa} - n < l_i \leq D - l_s + s - l - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0$$

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

$$s: \{j_{sa}^s, l_{k_1}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

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

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-l} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i-1} \\
& \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-2)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_s-n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-n_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
\end{aligned}$$

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\begin{aligned}
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_{is} - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - 1)!} \cdot (n - j_i)! \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{lk} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{lk}+1)}^{(\quad)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_i+n-D}^{l_s+s-l} \\
& \sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{is}=n+\mathbb{k}_1-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(\quad)} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}
\end{aligned}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

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

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

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 + k_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - k_3}$$

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

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

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

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

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

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

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

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

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

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

$$\sum_{n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

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

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

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

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

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

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

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

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

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

$$(l_{ik} + j_{sa}^{ik} + 1)$$

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

$$(l_{ik} + 1)$$

$$\sum_{n_i=n+l_k}^{()} \sum_{n+l_k-j_{sa}^{ik}}^{()} \sum_{l_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}^{()}$$

$$\sum_{(n_{is}+j_s-j_{ik}-l_{k1})}^{()}$$

$$\sum_{(n_{is}+j_s-j_{ik}-l_{k1})}^{()} \sum_{n_s=n_{sa}+j_{sa}^{ik}-l_{k2}}^{()}$$

$$\frac{(n_i + j_i + j_{sa}^{ik} - j_{sa} - 2 \cdot s - l_{k1} - l_{k2} - l_{k3})!}{(n_i + j_i + j_{sa}^{ik} - l_{k1} - l_{k2} - l_{k3})! \cdot (n + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s)!}$$

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

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

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

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

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

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

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

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

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

$$s: \{j_{sa}^s, l_{k1}, j_{sa}^{ik}, \dots, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

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

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

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

$$\sum_{...}^{...-j^{sa}-\mathbb{k}_2} \sum_{...}^{...+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_{sa}=n+\mathbb{k}-j^{sa}+1) \cdot (n_{is}-j_i+1)}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

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

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

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

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

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

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

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

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

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$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=l_s+j_{sa}-l+1)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_3-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-2)!(n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-l_3-l_{k_3}-1)!}{(j_i-n_{sa}-1)!(n_{sa}+j_{sa}-n_s-j_i-l_{k_3})!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)!(n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)!(j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}
 \end{aligned}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)! \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_1 : z = 3 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 + \mathbb{k}_3 \Rightarrow$$

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s + n - 1)!}{(n_s + n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{lk}-D-s}^{l_i+1} \sum_{(l_i+j_{sa}-l-s+1)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_{ik} = n + j_{sa}^{lk} - D - s}^{l_{ik} - l + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{lk}}^{(j_{sa}^{lk} - j_{sa}^{lk} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{(n_{is} - 1)} \\
& \sum_{n + \mathbb{k}_1}^{(n_{is} - 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_{is} - 1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{(n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3)} \\
& \frac{(n_{is} - j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_{is} - l - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$j_i \geq n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{j_s} \sum_{j_{ik}=j_{sa}}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{j_{sa}=n+j_{sa}-D}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j_{sa}-s}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{ik}+j_{sa}-\mathbb{k}_2} \sum_{n_{sa}=n+\mathbb{k}_3-j_{sa}+1}^{n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \sum_{n_s=n-j_i+1}^{(n_i-n_{is}-1)!} \cdot \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)} \\
 & \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - l} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(l_i + j_{sa} - l - s + 1)} \sum_{j_{sa}^{sa} = j_{sa} - j_{sa}^{ik}}^{(n_i + j_s - l - k_1)} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n + k_2 + k_3 + 1)}^{(n_{is} + j_s - l - k_1)} \\
 & \frac{(n_{ik} + j_{ik} - j^{sa} - l - k_1)!}{(n_{sa} - k_3 - j^{sa} - 1)!} \sum_{j_i = 1}^{(n_{sa} + j^{sa} - j_i - k_2)} \\
 & \frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{ik} - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)}
 \end{aligned}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{(n_s=n_{sa}+j_{sa}-j_i-l_{k_3})}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - s - n + l_i)!}{(D + j_{sa} - n - l_i)! \cdot (n - j_i)!}$$

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

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

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

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

$D + s - n < l_i \leq l_i + l_s + s - n = D$

$D > n < n \wedge l_{k_1} = l_{k_2} = l_{k_3} > 0$

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

$\{j_{sa}^{ik}, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^{ik}, \dots, l_{k_3}, j_{sa}^{ik}\} \wedge$

$s \geq 6 \wedge s = s - l_s \wedge$

$l_{k_2} = s - l_{k_1} = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$

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

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

$$\begin{aligned}
 & \sum_{n_i = \mathbf{n} + \mathbb{k}}^{\mathbf{n}} \sum_{\substack{(n_i - j_s + 1) \\ (n_{i_s} = \mathbf{n} + \mathbb{k} - j_s + 1)}} \sum_{\substack{n_{i_s} + j_s - j_{ik} - \mathbb{k}_1 \\ n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}} \\
 & \sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}} \sum_{\substack{n_{sa} + j^{sa} - j_i - \mathbb{k}_3 \\ n_s = \mathbf{n} - j_i + 1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_{sa} + j_i - n_s - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

$$\sum_{k=\mathbf{l}}^{\mathbf{l}_{ik} - \mathbf{l} - j_{sa}^{ik} + 2} \sum_{(j_s = \mathbf{l}_i + \mathbf{n} - D - s + 1)}$$

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

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^{\mathbf{n}} \sum_{\substack{(n_i - j_s + 1) \\ (n_{i_s} = \mathbf{n} + \mathbb{k} - j_s + 1)}} \sum_{\substack{n_{i_s} + j_s - j_{ik} - \mathbb{k}_1 \\ n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}}$$

$$\sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}} \sum_{\substack{n_{sa} + j^{sa} - j_i - \mathbb{k}_3 \\ n_s = \mathbf{n} - j_i + 1}}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s + j_i - n - 1)!}{(n_s - j_i - 1)!} \cdot \\
& \frac{(l_s - l - 1)!}{(j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j^{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = l_i + n - D - s + 1)} \\
& \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{()} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}} \\
& \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{is} = n + \mathbb{k}_1 - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned}
 & j_{ik}^{sa} \cdot j_{ik}^{sa} = \sum_{k=l}^{(n_i - l - D - s)} \sum_{(j_s=2)}^{(n_i - l - D - s)} \\
 & \sum_{(l_i+j_{sa}-l-s+1)}^{(l_i+j_{sa}-l-s+1)} \sum_{(j_i=j^{sa}+s-j_{sa})}^{(j_i=j^{sa}+s-j_{sa})} \\
 & \sum_{(n_i+k)}^{(n_i+k)} \sum_{(n_{is}=n+k-j_s+1)}^{(n_{is}=n+k-j_s+1)} \sum_{(n_{ik}=n+k_2+k_3-j_{ik}+1)}^{(n_{ik}=n+k_2+k_3-j_{ik}+1)} \\
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_3)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=0}^{(l_s - l + 1)} \frac{(l_i + j_i - l - s + 1)!}{(j_s = l_i + n - s + 1)} \cdot \\
& \sum_{j_{ik} = j_s + j_{sa}^{ik}} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_i)} \sum_{j_i = j^{sa} + s - j_{sa}} \\
& \sum_{n_i = n + k} \sum_{(n_{ik} = n + k - j_s + j_{ik} - k_1)} \sum_{(n_{ik} = n + k_2 + k_3 - j_{ik} + 1)} \\
& \sum_{(n_{ik} = n - j^{sa} - k_2)} \sum_{(n_{sa} = j^{sa} - j_i - k_3)} \sum_{(n_{sa} = n - k_3 - j^{sa} + 1)} \sum_{n_s = n - j_i + 1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

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

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

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_1)}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_{sa}^{ik})}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (j_i - j_{sa}^{ik} - 2 \cdot s)!}$$

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

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

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

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

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

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

$$D - n < l_{sa} < D + l_s + 1 - n - 1 \wedge$$

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

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

$$s: \{j_{sa}, k_1, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

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

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \frac{(n_{sa}-l_{k_3}-1)!}{(j_i-n_{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i-l_{k_3})!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

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

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{ik}+s-l-j_{sa}^{ik}+2}^{l_{sa}+s-l-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_{is} - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{lk} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{lk}+1)}^{(\quad)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-l-j_{sa}^{lk}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot
\end{aligned}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

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

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

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

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

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

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

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

$$\sum_{j_{ik}=j_s}^{l_s+j_{sa}^{ik}-l} \sum_{j_i=j_i+j_{sa}-s}^{j_i=l_s+s-l} \sum_{j_i=l_s+s-l+1}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

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

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

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

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

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

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

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

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

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

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

$$\sum_{n_i=n+k}^{()} \sum_{n+k-j_s}^{()} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{n_{ik}+j_{ik}^{ik}-k_2}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i + n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

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

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

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

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

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

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

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

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

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

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i)}^{(n_{is}-j_i-\mathbb{k}_1)}$$

$$\frac{(n_{is}-j_i-\mathbb{k}_2)!(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}{(n_{sa}=n_{is}-j^{sa}+1) n_{is} j_i+1}$$

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

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

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

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

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

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

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

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

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

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_2+l_3-j_i+l_1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_k+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_2}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \frac{(n_{is}-n_{ik}+1)!}{(j_{ik}-j_s+1)!(n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)!(n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
 \end{aligned}$$

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

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

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)! \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + \dots - n - 1)!}{(n_s + \dots - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + \dots - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)} \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_s + j_{sa}^{ik} - l} \sum_{(j^{sa} = l_s + j_{sa} - l + 1)}^{(l_{sa} - l + 1)} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
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$$\begin{aligned}
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_s = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(j_s - l_i)} \sum_{j_{ik} = l_{sa} + n - D}^{(l_s - j_s - l)} \sum_{j_i = j^{sa} + s - j_{sa}}^{(j_s - j_{sa}^{ik} + 1)} \\
& \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - 1)} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}^{(n_s - 1)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{(n_s - 1)} \\
& \frac{(n_s + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_s + j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$j_s \geq n - l_i \wedge l_i \neq j_i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{l=1}^{\binom{()}{l+1}} \sum_{j_s=j_{ik}}^{j_{sa}^{ik}+1} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{j_{sa}=l_{sa}+n-j_{ik}}^{j_{sa}+s-j_{sa}} \sum_{n_i=n+\mathbb{k}}^{(n_i-1)-\mathbb{k}_1} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_{ik}+j_{sa}-j_{sa}-\mathbb{k}_2)-n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \sum_{n_s=n-j_i+1}^{(n_{sa}-\mathbb{k}_3-j_{sa}+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)} \\
 & \sum_{j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(l_{sa} - l + 1)} \sum_{j_{ik}^{sa} = j_{sa} - j_{sa}^{ik}}^{(\quad)} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n + k_2 + l_{sa} - j_s)}^{n_{is} + j_s - k_1} \\
 & \frac{(n_{ik} + j_{ik} - j^{sa} - k_1 - 1)! \cdot (n_{sa} + j^{sa} - j_i - k_1)!}{(n_{sa} - k_3 - j_s - 1)! \cdot (n_{is} - 1)!} \cdot \frac{(n_{is} - 1)!}{(n_{is} - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)}
 \end{aligned}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2)} \sum_{(n_s=n_{sa}+j_{sa}-j_i-lk_3)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa} - 2 \cdot s - lk_1 - lk_2 - lk_3)!}{(n_i - n - lk_1 - lk_2 - lk_3)! \cdot (n + j_{sa} - j_{sa} - s)!}$$

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

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

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

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

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

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

$D + j_s - n < l_{sa} \wedge D + l_s + j_{sa} - 1$

$D > n < n \wedge lk = lk_1 + lk_2 + lk_3 > 0$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{lk_2} + j_{sa} - 1 = j_{sa}^{ik} - 1 \wedge$

$s \in \{j_{sa}^s, lk_1 + j_{sa}^{ik}, \dots, lk_2, j_{sa}^i, \dots, lk_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = j_{sa} - lk_1$

$lk_2 = j_{sa} - lk = lk_1 + lk_2 + lk_3 \Rightarrow$

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

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

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{i_s}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
& \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_{sa} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}
\end{aligned}$$

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

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{i_s}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
\end{aligned}$$

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

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

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

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!}$$

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

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

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

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

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

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

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

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$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz = \sum_{j_s=2}^{(l_{sa} + D - j_{sa})} \sum_{j_{ik}=j_s+j_{sa}-1}^{(j_{sa}^{ik} - j_{sa}^{ik} + 1)} \sum_{j_i=j_{sa}+s-j_{sa}}^{(j_{sa}^{ik} - j_{sa}^{ik} + 1)} \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n+k_3-j_{sa}+1}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n-j_i+1}^{(n_{sa}+j_{sa}-j_i-k_3)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

GÜLDÜNKYA

$$\begin{aligned}
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l_{sa}+n-j_{sa}^{ik}+1}^{(l_{ik}-j_{sa}^{ik}+2)} \sum_{j_{sa}=l_{sa}+n-j_{sa}^{ik}+1}^{(l_{sa}+1)} \sum_{j_{ik}=j_{sa}+s-j_{sa}}^{(l_s+1)} \\
& \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_{is}+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{(n_{ik}+1)} \sum_{n_{sa}=n+k_3-j^{sa}+1}^{(n_{sa}+j^{sa}-j_i-k_3)} \sum_{n_s=n-j_i+1}^{(n_{sa}+j^{sa}-j_i-k_3)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

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

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

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-j_{ik}-l_{k1}}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-l_{k2})}^{()} \sum_{(n_{sa}+j_{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{lk_1} - l_{k2} - l_{k3})!}{(n_i - n - l_{k1} - l_{k2} - l_{k3})! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

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

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

$$D \geq n < n \wedge l \neq i \wedge l_s = D - n + 1 \wedge$$

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

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

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

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

$$\geq n < l_s \wedge l = l_k > 0$$

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

$$s: \{j_{sa}^s, l_{k1}, l_{k2}, \dots, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$\geq 6 \wedge s + l_k \wedge$$

$$l_{kz}: z = 3 \wedge l_k = l_{k1} + l_{k2} + l_{k3} \Rightarrow$$

$$f_z^S j_s, j_{ik}, j_{sa}, j_i = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(l_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{(n_s=j_i+1)}^{n_{sa}+j_{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s)(n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_s-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)!(n_{is}+j_{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)!(n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)!(j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)!(n-j_i)!} + \\
 & \sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l-1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(l_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_i - 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_{is} - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - 1)!} \cdot (n - j_i)! \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\cdot)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{is}=n+\mathbb{k}_1-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}
\end{aligned}$$

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

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

$$D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

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

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

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

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

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

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

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

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

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

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

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_i-j_s+1)} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

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

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

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

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

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^s = \sum_{j_{ik}=j_{sa}^{ik}}^{(n_i-j_s)} \sum_{j_{sa}=j_i+j_{sa}-s}^{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{j_i=l_i+n-D}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

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

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

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

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k)}^{(n_i-j_s+1)} \sum_{(n_{ik}=j_i-j_{sa}-k)}^{()} \sum_{(n_{sa}=n_{ik}+j^{sa}-k_2)}^{()} \sum_{(n_{sa}=j^{sa}-j_i-k_3)}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot k_1 - k_2 - k_3)!}{(n_{ik} - k_2 - k_3)! \cdot (n_{sa} + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \leq l \wedge l_s \leq D - n - 1 \wedge$$

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

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

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

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

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

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i-1)}^{(n_{is}+j_s-j_{sa}-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n-j_s+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

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

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

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(n_{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

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

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

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

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

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_{sa} - j_i - k_3)! \cdot (s)!}$$

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

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

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

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

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

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

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

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

$D \geq n < n \wedge l = k_1 = 0 \wedge$

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

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 3, k = k_1 + k_2 + k_3 \Rightarrow$

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

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}-1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-n_{is}+n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}
 \end{aligned}$$

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

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

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 6 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \dots + \mathbb{k}_2 + \dots \Rightarrow$$

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}$$

$$\begin{aligned}
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_{is} - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n + j_i - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\cdot)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{is}=n+\mathbb{k}_1-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}
\end{aligned}$$

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

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

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

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

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

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

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

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

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

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

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

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

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

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

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

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

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

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

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

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

$$D \geq n < n \wedge I = k > 0 \wedge$$

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^s = \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}} \sum_{j_{sa}=j_{sa}^{ik}+1}^{(j_{sa}^{ik}+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{(j_{sa}^{ik}+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{(n_i-j_s)} \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n+k_3-j_{sa}+1}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n-j_i+1}^{(n_{sa}+j_{sa}-j_i-k_3)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

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

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

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

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

$$\sum_{n_i=n+k}^n \sum_{(n_i=j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j^{sa}-k_2)}^{(\)} \sum_{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot k_1 - k_2 - k_3)!}{(n_i - k_2 - k_3)! \cdot (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

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

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

$$D \geq n < n \wedge l_s \leq l \wedge l_s \leq D - n - 1 \wedge$$

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

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

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

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

$$D + l_s - s - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i-1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_2+1)} \sum_{(n_{is}=n+j^{sa}-n_s-j_i-\mathbb{k}_3)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

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

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

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(n_{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

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

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

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

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

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_{sa} - j^{sa} - s)! \cdot (l_{k_1} - 1)!}$$

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

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

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

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

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

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

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

$D \geq n < n \wedge l = l_{k_1} = 0 \wedge$

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

$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, l_{k_2}, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s \leq s + l_{k_1} \wedge$

$l_{k_2}: z = 3 \wedge l_{k_2} = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$

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

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_{s_3}-l_{k_3}-1)!}{(j_i-n_{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot
 \end{aligned}$$

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

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

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

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

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

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

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

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1$

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

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

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$

$s \geq 6 \wedge s = \dots + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \dots + \mathbb{k}_2 + \dots \Rightarrow$

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\begin{aligned}
& \sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{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_{sa} - l_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - l_2)!} \cdot \\
& \frac{(n_{sa} - n_{is} - l_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - 1)!} \cdot (n - j_i)! \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})!} \cdot \frac{(l_{ik} - j_{sa})!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+l_1}^n \sum_{(n_{is}=n+l_1-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - l_1 - l_2 - l_3)!}{(n_i - n - l_1 - l_2 - l_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}
\end{aligned}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

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

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

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

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\sum_{k=l}^s \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_s+s-l} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\begin{aligned}
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l + 1)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(n_i - j_s - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{j_s=2}^{(l_s-l+1)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}^{sa}=j_i+j_{sa}-s}^{(n_i-j_s-1)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
& \sum_{n+\mathbb{k}}^{(n_i-j_s-1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

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

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

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

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

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k)}^{(n_i-j_s+1)} \sum_{n_{ik}=1}^{(\cdot)} \sum_{j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j^{sa}-k_2)}^{(\cdot)} \sum_{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_i + j_s - j^{sa} - 2 \cdot k_1 - k_2 - k_3)!}{(n_i - k_2 - k_3)! \cdot (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

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

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

$$D \geq n < n \wedge l_s = l \wedge l_i \leq l + s - n \wedge$$

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

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

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

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

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

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned}
 f_{z^S} S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 &\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 &\frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j^{sa}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j^{sa}-1)! \cdot (n_s=n-j_i+l_{k_3})!} \\
 &\frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}-n_{ik}-j_s+1)!} \\
 &\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \\
 &\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \\
 &\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 &\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)} \\
 &\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_k} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l}^{\binom{D}{j_s}} \sum_{(j_s=j_{i_k}-j_{s_a}^{i_k}+1)}^{\binom{D}{j_s}}$$

$$\sum_{j_{i_k}=j^{s_a}+j_{s_a}^{i_k}-j_{s_a}}^{(l_s+j_{s_a}-l)} \sum_{(j^{s_a}=j_{s_a}+1)}^{(l_s+j_{s_a}-l)} \sum_{j_i=j^{s_a}+s-j_{s_a}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

$$\sum_{(n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})}^{\binom{D}{j_s}} \sum_{n_s=n_{s_a}+j^{s_a}-j_i-l_{k_3}}^{\binom{D}{j_s}}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_i \leq D + s - n \wedge$$

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

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

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

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

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

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik} - l} \sum_{(j_s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - l + 1)!} \cdot$$

$$\frac{(n - l_i)!}{(n - j_i)!} \cdot \sum_{k=l}^{-l+1} \sum_{(j_s=2)}$$

$$\sum_{j_i=l_s+j^{sa}}^{-l+1} \sum_{(j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n+l_{ik}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+l_{ik}-j_s+1)} \sum_{n_{ik}=n+l_{ik_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{j_s=j_{ik}^{ik}+1}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}-l}^{l_s+j_{sa}^{ik}-l} \sum_{j_{ik}+j_{sa}-j_s} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k} \sum_{n+l_k-j_s} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}$$

$$\sum_{(n_{ik}+j_{ik}+j_{sa}-l_{k2})} \sum_{n_s=n_{sa}+j_{sa}-j_i-l_{k3}}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - l_{k1} - l_{k2} - l_{k3})!}{(n_i + n - l_{k1} - l_{k2} - l_{k3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\geq n < n \wedge l \neq i \wedge l \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_s - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k1}, j_{sa}^{ik}, \dots, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz \mathcal{S}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}_1-j_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{(n_{sa}+j^{sa}-\mathbb{k}_3)}^{n_{sa}+j^{sa}-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{\binom{()}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}}} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{\binom{()}{n_{is}=n+lk-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2}} \sum_{n_s=n_{sa}+j_{sa}-j_i-lk_3}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{lk} - 2 \cdot s - lk_1 - lk_2 - lk_3)!}{(n_i - n - lk_1 - lk_2 - lk_3)! \cdot (n + j_{sa} - j_{sa}^{lk} - s)!}$$

$$\frac{(j_s - l - 1)!}{(j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D)}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{lk} + 1 \wedge j_s + j_{ik}^{lk} - 1 < j_{ik} \leq j_{sa}^{lk} + j_{sa} - j_{sa}^{lk} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j_{sa}^{lk} \leq j_{ik} + j_{sa} - s \wedge j_{sa}^{lk} - j_{sa} - s \leq n \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 > l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = lk > 0$$

$$j_{sa}^{lk} \leq j_{sa}^{lk} - 1 \wedge j_{sa}^{lk} - j_{sa} - 1 \leq j_{sa}^{lk} - 1 \wedge$$

$$s \in \{j_{sa}^{lk}, lk_1, j_{sa}^{lk}, \dots, lk_2, j_{sa}^{lk}, \dots, lk_3, j_{sa}^{lk}\} \wedge$$

$$s \geq 6 \wedge s = j_{sa}^{lk} \wedge$$

$$lk_2 = j_{sa}^{lk} \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^S = \sum_{k=l}^{(j_{ik}-j_{sa}^{lk}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa}} \sum_{\binom{()}{j_{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_k} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{j_{i_k}=j^{s_a}+j_{s_a}^{i_k}-j_{s_a}} \sum_{(j^{s_a}=j_i+j_{s_a}-s)}^{(l_s-l+1)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}}
 \end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \\
& \frac{(n_s + n - n - 1)!}{(n_s + n - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\cdot)} \\
& \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(\cdot)} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\cdot)} \sum_{j_i = l_i + n - D}^{l_s + s - l} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_{z, \dots, j_{ik}, j_{sa}, j_{sa}^{ik}} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j}^{(l_s - j_{sa} - l)} \sum_{(j_{sa}^{ik} - j_{sa})}^{(l_s - j_{sa} - l)} \sum_{(j_i = j^{sa} + s - j_{sa})}^{(l_s - j_{sa} - l)}$$

$$\sum_{(j_i = n + k)}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n + k_2 + k_3 - j_{ik} + 1)}^{(n_{is} + j_s - j_{ik} - k_1)}$$

$$\sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - k_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{j_s - l + 1} \frac{(j_s - l + k)!}{(j_s - l + k)!} \cdot \\
& \sum_{j_{ik}=j_{sa}^{sa}+j_{sa}^{sa}}^{j_{sa}^{sa}+j_{sa}^{sa}+j_{sa}^{sa}-l+1} \sum_{j_{sa}^{sa}+j_{sa}^{sa}-l+1}^{j_{sa}^{sa}+j_{sa}^{sa}-l+1} \sum_{j_{sa}^{sa}+j_{sa}^{sa}-l+1}^{j_{sa}^{sa}+j_{sa}^{sa}-l+1} \\
& \sum_{j_{sa}^{sa}+l}^n \sum_{j_{sa}^{sa}+l}^{j_{sa}^{sa}+l} \sum_{j_{sa}^{sa}+l}^{j_{sa}^{sa}+l} \sum_{j_{sa}^{sa}+l}^{j_{sa}^{sa}+l} \sum_{j_{sa}^{sa}+l}^{j_{sa}^{sa}+l} \sum_{j_{sa}^{sa}+l}^{j_{sa}^{sa}+l} \\
& \sum_{j_{sa}^{sa}+l}^{j_{sa}^{sa}+l} \sum_{j_{sa}^{sa}+l}^{j_{sa}^{sa}+l} \sum_{j_{sa}^{sa}+l}^{j_{sa}^{sa}+l} \sum_{j_{sa}^{sa}+l}^{j_{sa}^{sa}+l} \sum_{j_{sa}^{sa}+l}^{j_{sa}^{sa}+l} \sum_{j_{sa}^{sa}+l}^{j_{sa}^{sa}+l} \\
& \sum_{(n_{sa}=n+l_3-j_{sa}^{sa}+1)}^{(n_{sa}=n+l_3-j_{sa}^{sa}+1)} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_2)!} \cdot \\
& \frac{(n_{sa} - n_s - l_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_{ik}^{sa}+s-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s}^{(n_i-j_s+1)} \sum_{(n_{is}=n_{ik}+j_s)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s)}^{(n_i-j_s+1)} \frac{(n_i + j_i + j_{sa} - j_{sa} - 2 \cdot s - lk_1 - lk_2 - lk_3)!}{(n_i - n - lk_2 - lk_3)! \cdot (n + j_i + j_{sa} - j_{sa} - 2 \cdot s)!} \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$

$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n \leq D + j_i + s - n - 1 \wedge$

$D > n \wedge I = k > 0 \wedge$

$j_{sa} < j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^{ik}, j_{sa}^{ik}, \dots, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$lk_z: z = 3 \wedge k = lk_1 + lk_2 + lk_3 \Rightarrow$

$$fz^{\mathcal{S}}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}-j_i-l_{k_3})}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}-j_i-l_{k_3})} \sum_{(n_{sa}=n+l_{k_3}-j_i+1)}^{(n_{sa}=n+l_{k_3}-j_i+1)} \sum_{n_s=n-j_i+1}^{(n_{sa}=n+l_{k_3}-j_i+1)}$$

$$\frac{(n_{is}-l_{k_1}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!}$$

$$\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-l-s+1}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_k} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l}^{\binom{()}{}} \sum_{(j_s=j_{i_k}-j_{s_a}^{i_k}+1)}^{\binom{()}{}}$$

$$\sum_{j_{i_k}=l_i+n+j_{s_a}^{i_k}-D-s}^{l_s+j_{s_a}^{i_k}-l} \sum_{(j^{s_a}=j_{i_k}+j_{s_a}-j_{s_a}^{i_k})}^{\binom{()}{}} \sum_{j_i=j^{s_a}+s-j_{s_a}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

$$\sum_{(n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})}^{\binom{()}{}} \sum_{n_s=n_{s_a}+j^{s_a}-j_i-l_{k_3}}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l - 1)!}{(l_s - l + 1)! \cdot (l - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_s - l + 1)} \\
& \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(j_{sa}^{ik} - l - s + 1)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}^{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
\end{aligned}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_s=l_i+n-D-s}^{l_s-1} \sum_{j_{ik}=j_s+l_{ik}-1}^{j_{sa}=j_s+l_{ik}-j_{sa}^{ik}} \sum_{j_{sa}=j_s+l_{ik}-j_{sa}^{ik}}^{j_s-1} \sum_{n+l_k}^n \sum_{n_{is}=n+l_k}^{j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{j_s+1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}}^{j_s+1} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-l_{k_3}}^{j_s+1} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > l_s \wedge n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{(l_s - l + 1)} \sum_{j_s=2}^{(l_i + j_{sa} - s + 1)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_i+n+j_{sa}-l)}$$

$$\sum_{j_i=j_{sa}+s-j_{sa}}^{(n_{is}+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^{(n_{ik}+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}-j_s+1}^{(n_{ik}+1)}$$

$$\sum_{k=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_{ik}+1)}$$

$$\sum_{n_{sa}=1}^{(n_{ik}+1-j_{sa}-\mathbb{k}_2)}$$

$$\sum_{n_s=n-j_i+1}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j_{sa}^a=l_i+n+j_{sa}-D-s)} \sum_{j_i=j_{sa}+s-j_{ik}}^{(\cdot)}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-lk_1}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_1)}^{(\cdot)} \sum_{n_{sa}=n_{sa}+j_{sa}-j_i}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{lk_1} - lk_1 - lk_2 - lk_3)!}{(n_i - n - lk_1 - lk_2 - lk_3)! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s = D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq a + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{lk} - j_{sa} \leq j_{sa}^{lk} \leq j_i + j_{sa} - s \wedge a - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 > 0 \wedge l_{sa} + j_{sa}^{lk} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{lk} - n < l_{sa} \leq D + l_s + j_{sa}^{lk} - n - 1 \wedge$$

$$\geq n < l_s \wedge l = lk > 0$$

$$j_{sa} < j_{sa}^{lk} - 1 \wedge j_{sa}^{lk} - 1 \wedge j_{sa}^s = j_{sa}^{lk} - 1 \wedge$$

$$s: \{j_{sa}^s, lk_1, \dots, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$$

$$\geq 6 \wedge s + lk \wedge$$

$$lk_z: z = 3 \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{lk}+1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{(\quad)}{\quad} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-j_{sa}-n_{is}+n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)!(n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{(\quad)}{\quad} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_s+s-l+1}^{l_{sa}+s-l-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\frac{\sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_i-n_{is}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_i-l_1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_i-l_2-l_3)!} \cdot \frac{(n_{ik}-n_{sa}-l_2-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_1-l_2)!} \cdot \frac{(n_s-1)!}{(l_s+l_1-l-1)!} \cdot \frac{(n-j_i)!}{(l_s-l-1)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-j_{ik}-j_{sa}^{ik}+1)!}{(j_s+l_1-l_2-j_{ik}-l_3-l_1-l_2-l_3)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=n+l_3}^n \sum_{(n_{is}=n+l_3-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_3}$$

$$\frac{(n_i+j_i+j_{sa}-j^{sa}-2 \cdot s-l_1-l_2-l_3)!}{(n_i-n-l_1-l_2-l_3)! \cdot (n+j_i+j_{sa}-j^{sa}-2 \cdot s)!}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - 1)! \cdot (j_{ik} - j_s - l + 1)!} \cdot$$

$$\frac{(n - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=l}^{-l+1} \sum_{(j_s=2)}$$

$$\sum_{j_i=j^{sa}+j_s}^{-l+1} \sum_{(n_{is}=n+l_s-j_s+1)} \sum_{(n_{ik}=n+l_{ik}+l_s-j_s-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{(n_{is}=n+l_s-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+l_{ik}+l_s-j_s-l+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+l_{s3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{j_s=j_{ik}^{ik}+1}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{sa}+j_s^{lk}}^{(j_{sa}-l)} \sum_{(j_{sa}=l_{sa}+n)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^{(j_s+1)} \sum_{n+l_k-j_s} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{ik}+j_{ik}^{ik}-l_{k_2})}^{()} \sum_{n_s=n_{sa}+j_{sa}^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i + j_i + j_{sa} - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j_{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i)}^{(n_{is}-j_s+1)} \sum_{(n_{sa}=n+\mathbb{k}_1-j_i)}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_1)}$$

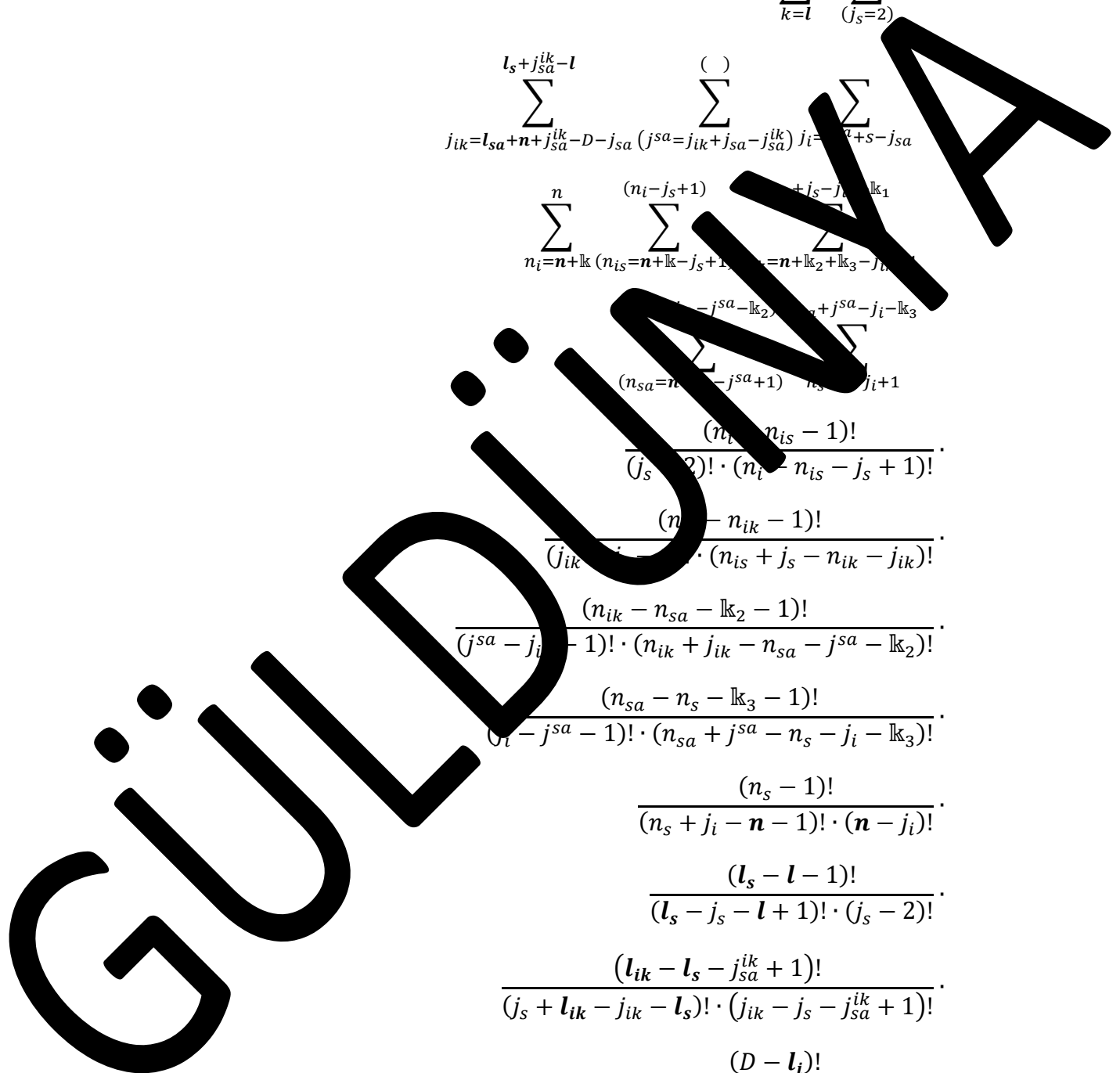
$$\frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-j_{sa}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$



$$\begin{aligned}
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \frac{(n_{sa}-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}
 \end{aligned}$$

$$\sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_s \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_i \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_1 : z = 3 \wedge \mathbb{k}_1 = \mathbb{k}_1 + \dots + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + n - n - 1)!}{(n_s + n - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - l - 1)!}{(n - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + n - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{l_s-l-1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l-1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{sa}+j_{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l-1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{j_s+l_{ik}-j_{ik}-l_s} \sum_{j_s=j_s+j_{sa}^{ik}-1}^{j_s+l_{ik}-j_{ik}-l_s-1} (j_s+l_{ik}-j_{ik}-l_s-j_{sa}^{ik}+1)$$

$$\sum_{j_s=j_s+j_{sa}^{ik}-1}^{j_s+l_{ik}-j_{ik}-l_s-1} \sum_{j_i=j^{sa}+s-j_{sa}}^{j_s+l_{ik}-j_{ik}-l_s} \sum_{j_s=j_s+j_{sa}^{ik}-1}^{j_s+l_{ik}-j_{ik}-l_s-1} (j_s+l_{ik}-j_{ik}-l_s-j_{sa}^{ik}+1)$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-l_i-1)} \sum_{n_{is}=n+l_{ik}-j_s+1}^{(n_i-l_i-1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-l_i-1)} (n_i-l_i-1)$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_i-l_i-1)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(n_i-l_i-1)} (n_i-l_i-1)$$

$$\frac{(n_s + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_s + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$n \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{\mathbb{k} - j_{sa}^{ik} + 1} \sum_{l=2}^{\mathbb{k} - j_{sa}^{ik} + 1} \sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{\binom{n_i - j_{sa} - 1}{j_{sa} + j_{sa}^{ik} - j_{sa}}} \sum_{j_i = j_{sa} + j_{sa}^{ik} - j_{sa} + s + n - D - j_{sa}^{ik}}^{\binom{n_i - j_{sa} - 1}{j_{sa} + j_{sa}^{ik} - j_{sa}}} \sum_{n_i = n + \mathbb{k}}^{\binom{n_i - j_{sa} - 1}{j_{sa} + j_{sa}^{ik} - j_{sa}}} \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{\binom{n_i - j_{sa} - 1}{j_{sa} + j_{sa}^{ik} - j_{sa}}} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{\binom{n_i - j_{sa} - 1}{j_{sa} + j_{sa}^{ik} - j_{sa}}} \sum_{n_{sa} = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{\binom{n_i - j_{sa} - 1}{j_{sa} + j_{sa}^{ik} - j_{sa}}} \sum_{n_s = n - j_i + 1}^{\binom{n_{sa} - \mathbb{k}_3 - j_{sa} + 1}{n_s = n - j_i + 1}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j^{sa}=j_i+j_{sa}-s)} \sum_{(j_i=l_s+s-l+1)}^{(l_{ik}+s-l-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j_{sa}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-1)! \cdot (n_s=n-j_i+1)!}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j^{sa}=j_i+j_{sa}-s)} \sum_{(j_i=l_{ik}+s+n-D-j_{sa}^{ik})}^{(l_s+s-l)}$$

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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_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{(l_s - l - 1)! \cdot (l - 2)!}{(l_s - j_s - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i - l_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} + j_{sa} - s = l_s \wedge$

$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_{sa} + j_{sa}^{ik} - n = l_{ik}$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$

$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \dots + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\begin{aligned}
& \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-k_2) \\ (n_{sa}=n+k_3-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-k_3 \\ n_s=n-j_i+1}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_i - 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_i - k_2)!} \cdot \\
& \frac{(n_{sa} - n_{ik} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot (n - j_i)! \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - l - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_s+j_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
& \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
\end{aligned}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(s+j_{sa}-l)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j^{sa}+j_s^{ik}}^{(s+j_{sa}-l)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{()} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z^S j_s, j_{sa}^{ik}, j_i = \sum_{k=l}^{j_{ik}-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{j_{ik}-j_{sa}^{ik}+1}$$

$$\sum_{j_{ik}=n-D}^{l_s+j_{sa}^{ik}-l} \sum_{(j_s)}^{(j_s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j_s)}$$

$$\sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_i=j_s+1)}^{(n_i=j_s+1)} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)} \sum_{n_s=n-j_i+1}^{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}$$

$$\frac{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}{\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\begin{aligned}
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{l_s - l + 1} \sum_{j_s=2}^{(l_s - l + 1) - k} \\
 & \sum_{j_{ik}=l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{j_{sa}=j_{ik} + j_{sa} - j_{ik}}^{(j_{sa} - j_{ik} + 1) - k} \sum_{j_i=j_{sa} + s - j_{sa}}^{(j_{sa} - j_{ik} + 1) - k} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_{is}+1) - k} \sum_{n_{ik}=n+l_k+l_{k3}-j_{ik}+1}^{(n_{ik}+1) - k} \\
 & \sum_{n_{sa}=n+l_k-j_{sa}-l_{k2}}^{(n_{ik}+1) - k - j_{sa} - l_{k2}} \sum_{n_{sa}+j_{sa}-j_i-l_{k3}}^{(n_{sa}+1) - k - j_{sa} - l_{k3}} \\
 & \sum_{n_s=n-j_i+1}^{(n_{sa}+1) - k - j_{sa} + 1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k2})!} \cdot \\
 & \frac{(n_{sa} - n_s - l_{k3} - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - l_{k3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j_{sa}+s-1}^{(\cdot)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k_1}}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{(\cdot)} \sum_{(n_{sa}+j_{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s = D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} \wedge j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq j_{sa}^{ik} + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_i - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$j_{sa} \geq 6 \wedge j_{sa} \geq s + l_k \wedge$$

$$l_{k_2}: z = 3 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \binom{(\quad)}{\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_2+l_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_k+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}+1)!}{(j_{ik}-j_s+1)!(n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)!(n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{lk}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{lk}+1)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{lk}+1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l_{ik}-l+1} \binom{(\quad)}{\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_2+l_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

$$\frac{\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - k_2)!} \cdot \frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - l_{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z \mathcal{S}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{()} \sum_{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!}$$

$$\frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j}^n \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_{ik}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_i+j_{sa}-s}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{j_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}}^{j_{sa}, j_i} \sum_{(j_s=2)}^{(l_s-l)} \sum_{n+\mathbb{k}}^{(n_i-j_s)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n+\mathbb{k}_3-j_{sa}+1)}^{n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \sum_{n_s=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_i+j_{sa}-j_{sa}^{ik})} \sum_{(j_{sa}^{ik}=j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_i-j_s-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-k_2)} \sum_{(n_{sa}+j_{sa}-j_i-k_3)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot k_1 - k_2 - k_3)!}{(n_i - k_2 - k_3)! \cdot (n_i + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_i = l \wedge l_s \leq D - n - 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + l_s + s - n - 1 < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=l_i+n+j_{sa}-j_{sa}^{ik}}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i+1)}^{(n_i+j_s-j_{sa}-\mathbb{k}_1)}$$

$$\frac{(n_{sa}-j_{sa}-\mathbb{k}_2-j_i+1)! \cdot (n_{sa}+j^{sa}-j_i-\mathbb{k}_3)!}{(n_{sa}=n+\mathbb{k}-j_s+1-j^{sa}+1)! \cdot j_i+1}$$

$$\frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-j_i-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_s-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

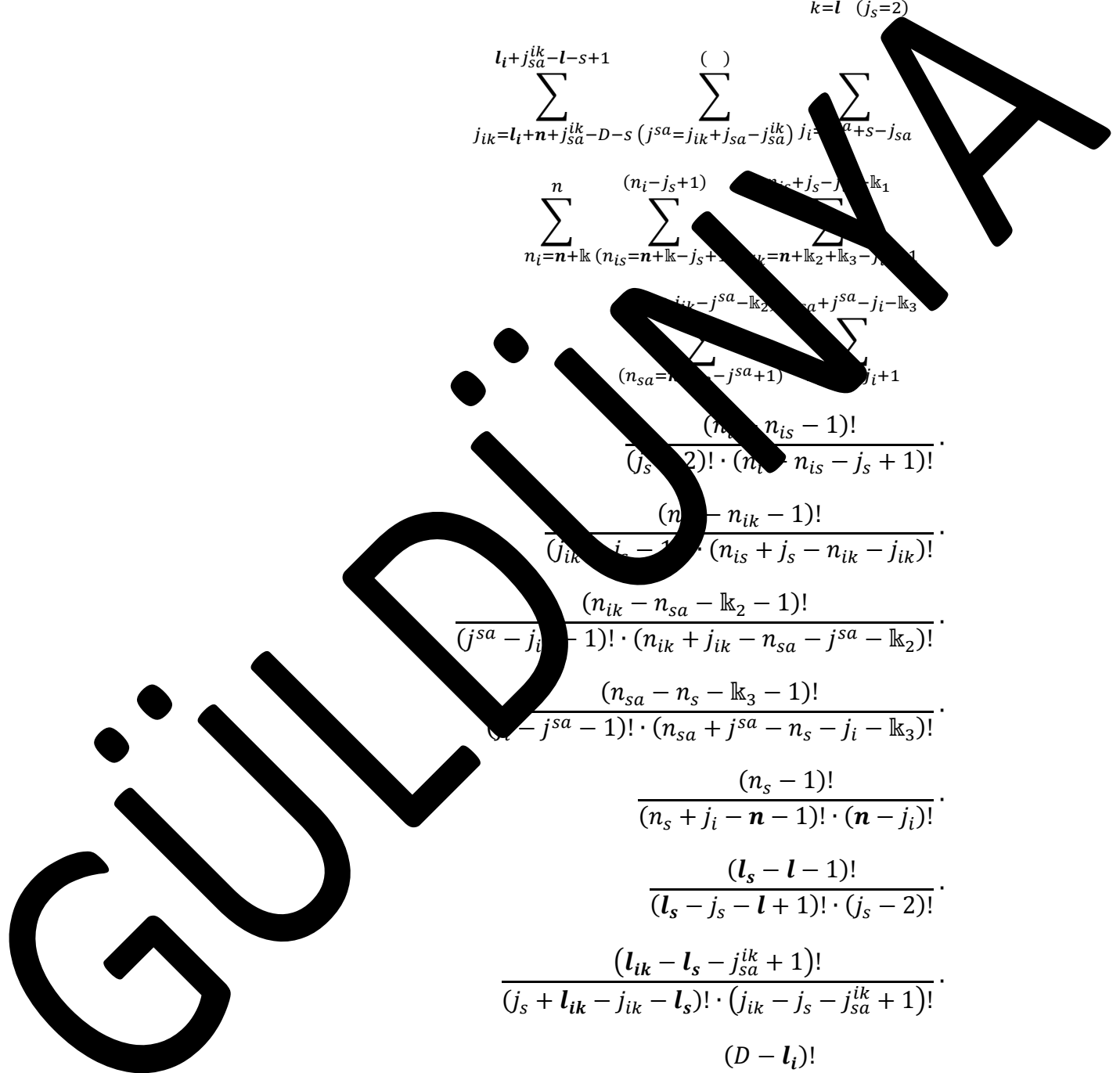
$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)}$$



$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{\binom{()}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}}} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{\binom{()}{n_{is}=n+lk-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2}}^{(n_i-j_s+1)} \sum_{n_s=n_{sa}+j_{sa}-j_i-lk_3}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{lk} - 2 \cdot s - lk_1 - lk_2 - lk_3)!}{(n_i - n - lk_1 - lk_2 - lk_3)! \cdot (n_i + j_i + j_{sa} - j_{sa}^{lk} - s)!}$$

$$\frac{(j_s - l - 1)!}{(j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D)}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{lk} + 1 \wedge j_s < j_{sa}^{lk} - 1 \leq j_{ik} - j_{sa}^{lk} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j_{sa}^{lk} \leq j_i + j_{sa} - s \wedge j_{sa}^{lk} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 > l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} - lk_1 \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$l_{sa} - j_{sa} - n - lk_1 \leq D - n - l_i + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = n - 0 \wedge$$

$$j_{sa} < j_{sa}^{lk} - 1 \wedge j_{sa}^{lk} < j_s - 1 \wedge j_{sa}^s = j_{sa}^{lk} - 1 \wedge$$

$$s: \{j_{sa}^s, lk_1, j_{sa}^{lk}, lk_2, \dots, lk_3, j_{sa}^i\} \wedge$$

$$s \leq 6 \wedge s \leq s + lk \wedge$$

$$lk_z: z = 3 \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow$$

$$f^z S_{j_s, j_{ik}, j_{sa}^{lk}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{(\cdot)}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-l-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+l_k-j_s+1}} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}-1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{\binom{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})}{n_{sa}=n+l_{k_3}-j^{sa}+1}} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{\binom{(n_i-1)}{(j_s-2)!(n_i-n_{is}+1)!}}{\binom{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s+1)!(n_{is}+j_s-n_{ik}-j_{ik})!}} \\
 & \frac{\binom{(n_{ik}-n_{sa}-l_{k_2}-1)}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!}}{\binom{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)!(n_{is}+j^{sa}-n_s-j_i-l_{k_3})!}} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}
 \end{aligned}$$

$$\sum_{k=l}^{\binom{(\cdot)}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{(\cdot)}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+l_k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(n_i-j_s+1)}
 \end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_i \leq j^{sa} + j_{sa}^{ik} - l_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_s \leq j_i \leq l_i$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_i + j_{sa} - s \wedge l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 6 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \dots + \mathbb{k}_2 + \dots \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - l_s - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\cdot)} \\
 & \sum_{j_{ik} = j^{sa} + j_{sa}^{lk} - j_{sa}}^{(l_s + j_{sa} - l)} \sum_{(j^{sa} = l_{sa} + n - D)} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_{z, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{sa}+n+1}^{(l_{sa}+n+1-l-j_{sa}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_s=j_{ik}-j_{sa}^{ik}}$$

$$\sum_{j_{sa}=j_{ik}-j_{sa}^{ik}}^{l_s+j_{sa}^{ik}-l} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}^n \sum_{n_{is}=n+l_s-j_s+1}$$

$$\sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-k_3} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2}$$

$$\frac{(n_i - n - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D - n - 1 \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{(l_s-l+1)} \sum_{j_s=2}^{l_s-l+1} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(n_i-n_{is}+1)} \sum_{j_i=j_{sa}-s}^{l_{ik}+s-1} \sum_{n_i=n+\mathbb{k}}^{(n_i-n_{is}+1)} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-n_{is}+1)-\mathbb{k}_1} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_{sa}=n+\mathbb{k}_3-j_{sa}+1}^{n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \sum_{n_s=n-j_i+1}^{(n_{sa}-\mathbb{k}_3-j_{sa}+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

GÜLDÜZYA

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_{ik}+s+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_1)}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - k_1 - k_2 - k_3)!}{(n_i - n - k_1)! \cdot (k_2 - k_3)! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s = D - n + 1 \wedge$

$D + l_s + s - n - l_i + 1 \leq l \leq \dots - 1 \wedge$

$1 \leq j_{ik} - j_{sa}^{ik} + \dots \wedge j_s + j_{sa}^{ik} - 1 \dots \geq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \dots \leq j_i + j_{sa} - s \dots + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge \dots + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$\dots + j_{sa}^{ik} - \dots < l_{ik} \leq D \dots l_s + j_{sa}^{ik} - n - 1 \wedge$

$D \geq \dots < n \wedge l \dots \wedge$

$j_{sa} < j_{sa}^i \dots \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$\{j_{sa}^s, k_1, j_{sa}^k, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-j_{sa}+j_i-l_{k_3})} \sum_{n_s=n-j_i+l_{k_3}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{(l_s - l - 1)! \cdot (l - 2)!}{(l_s - j_s - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i - l_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

$D + l_s + s - n - l_i + 1 \leq l \leq i - 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa}^{ik} - j_{sa} \leq j_i \leq j_{ik} \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - l_i + j_{sa} - l_{sa} \wedge$

$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$

$D \geq n < n \wedge l = i > 0 \wedge$

$j_s < j_{sa}^l - j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^{ik}, \dots, j_{sa}^s\} \wedge$

$s \geq 6, l = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
 \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{ik} - j_{ik})!} \cdot \\
 \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-l} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{\substack{() \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-l-s+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n+\mathbb{k}_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa}^{lk} - j_{sa}^{lk} - l_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_{sa} - l_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{sa}-l+1)} \sum_{j_i=l_{ik}+j_{sa}^{ik}-l-s+2}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_{sa}^{ik} = j_{sa}^{ik} - j_{sa}}^{(j_{sa}^{ik} - j_{sa})} \sum_{j_i + j_{sa} - s}^{(j_i + j_{sa} - s)} \sum_{j_i = s+1}^{l_{ik} + j_{sa}^{ik} - l - s + 1} \\
& \sum_{n_{is} = n + l_k - j_s + 1}^{(n_i - l_i - 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - l_{k_1}} \\
& \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - l_{k_2})}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - l_{k_2})} \sum_{n_s = n_{sa} + j^{sa} - j_i - l_{k_3}} \\
& \frac{(j_i + j_{sa} - j^{sa} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - l_i - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$n - l \neq i \wedge l \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{l=1}^{()} \sum_{j_s=j_{ik}}^{j_{sa}^{ik}+1} \sum_{j_{sa}+j_{sa}^{ik}+j_{sa}^{s-l}}^{(j_i+j_{sa}-s)} \sum_{j_{ik}+1}^{(j_{sa}+1)} \sum_{j_i=s+1}^{l-l} \sum_{n_i=n+k}^{(n_i-1)} \sum_{n_{is}=n+k-j_s+1}^{n_i-k_1} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{(n_{ik}-j_{sa}-k_2)} \sum_{n_{sa}=n-k_3-j_{sa}+1}^{n_{sa}+j_{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + \dots)}^{(\quad)} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_s + j_{sa}^{ik} - l} \sum_{(j^{sa} = j_{sa}^{ik} - l_{sa} - l + 1)}^{(l_{sa} - l + 1)} \sum_{n_i = n + k}^n \sum_{(n_{is} = n - k)}^{(n_i - j_s + 1)} \sum_{(n_{is} + j_s - j_{ik} - l_{sa} - l + 1)}^{(n_{is} + j_s - j_{ik} - l_{sa} - l + 1)} \sum_{(n_{ik} + j_{ik} - n_{sa} - k_2)}^{(n_{ik} + j_{ik} - n_{sa} - k_2)} \sum_{(n_s = n - j_i + 1)}^{(n_s = n - j_i + 1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^a+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=s}^{l_s+s-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_1})}^{()} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D) j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i = 0 + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^a + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_{sa}^a \leq j_i + j_{sa} - s \wedge j_{sa}^a - j_{sa} \leq j_i \leq n \wedge$$

$$l_{k_1} - j_{sa}^{ik} + 1 = l_{sa}^a \wedge l_{sa}^a + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = l_{k_1} = 0 \wedge$$

$$j_{sa}^a < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^a - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, j_{sa}^a, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_{k_1} \wedge$$

$$z = 2 \wedge k = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} (l_{ik}+j_{sa}^{ik}-l-s+1) \sum_{(j^{sa}=j_{sa}+1)} (l_i-l+1) \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+k}^n (n_i-j_s+1) \sum_{(n_{is}=n+k-j_s+1)}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \frac{(n_{sa}-j_s-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_s+j^{sa}-n_s-j_i-k_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{ik}+j_{sa}^{ik}-l-s+2)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
& \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
& \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
& \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
& \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
& \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_k} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
& \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a})! \cdot (j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
& \frac{(l_i + j_{s_a} - l_{s_a} - s)!}{(j^{s_a} + l_i - j_i - l_{s_a})! \cdot (j_i + j_{s_a} - j^{s_a} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\sum_{k=l}^{\binom{D}{l}} \sum_{(j_s=j_{i_k}-j_{s_a}^{i_k}+1)}^{\binom{D}{l}}$$

$$\sum_{j_{i_k}=j^{s_a}+j_{s_a}^{i_k}-j_{s_a}}^{(l_{i_k}+j_{s_a}^{i_k}-l-s+1)} \sum_{(j^{s_a}=j_{s_a}+1)} \sum_{j_i=j^{s_a}+s-j_{s_a}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot \frac{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}{(l_s - l - 1)! \cdot (l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_s \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \cdot \frac{(n_{sa} + j^{sa} - j_i - \mathbb{k}_3)!}{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)! \cdot (n_s = n - j_i + 1)!} \cdot \frac{(n_i - j_s + 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l - 1)!}{(l_s - l + 1)! \cdot (l - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_i - l_{sa} - 1)!}{(j^{sa} + l_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D + l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i) \cdot (n - j_i)!} \cdot \\
& \sum_{j_s=l}^{j_s=j_{ik}-j_{sa}^{ik}+1} \sum_{j_{ik}=j_s}^{j_{ik}=j_s+l} \sum_{j_{sa}=j_{sa}^{ik}+1}^{j_{sa}=j_s+l} \sum_{j_i=j^{sa}+s-j_{sa}}^{j_i=j^{sa}+s-l} \\
& \sum_{i=n+\mathbb{k}_1}^n \sum_{(n_{is}=n+\mathbb{k}_1-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}^{ik}} = \sum_{k=l}^{j_s - j_{ik} - 1} \sum_{j_{sa}^{ik} = j_{sa} - k}^{l_{sa} - l + 1} \sum_{j_{sa} = j_{sa}^{ik} + k}^{l_{sa} - l + 1} \sum_{j_{sa} = n + k_3 - j_{sa}^{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{j_{sa} = n + k_3 - j_{sa}^{ik} + 1}^{n_{sa} + j_{sa} - j_i - k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+...)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}-j_{sa}^{ik}-j_{sa})}^{(\cdot)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_i+j_s-j_{ik}-\mathbb{k}_1)}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(\cdot)}$$

$$\frac{(n_i + j_i + \dots - j^{sa} - 2 \cdot \dots - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \dots - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l = l \wedge l_i = D + s - \dots \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + \dots \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \dots + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - \dots + 1 = l_s - \dots + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$\dots \wedge j_i \leq 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 f_{z^S} S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 &\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-}^{l_i-l+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_{is}+j_s-j_{ik}-l_{k_1})} \\
 &\frac{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}-1)! \cdot (n_{is}+j_s-j_i-l_{k_3})!}{(j_s-l+2)! \cdot (n_{is}-j_s+1)!} \cdot \\
 &\frac{(n_{is}-l_{k_1}-1)!}{(j_{ik}-j_s-l+1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \cdot \\
 &\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{ik}-j_{sa}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 &\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 &\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 &\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 &\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}
 \end{aligned}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{(n_s=n_{sa}+j_{sa}-j_i-l_{k_3})}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} \cdot \frac{(l_s - l - 1)!}{(j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n$
 $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_s \wedge$
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{ik} + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} - j_i \leq n \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$
 $D \geq n < n \wedge l = l_s - 0 \wedge$
 $j_s < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$
 $s: \{l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}\} \wedge$
 $\geq 6 \wedge l_s = s + l_k \wedge$
 $l_{k_2}: z = 3 \wedge l_{k_1} = l_{k_2} + l_{k_3} \Rightarrow$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{l_i-l+1}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
& \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
& \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
& \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
& \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_i - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{(\cdot)}{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}}
\end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_s \leq n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s > l_s \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_i - l_{sa} - 1)!}{(j^{sa} + l_i - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{()}{}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{\dots} \sum_{j_i=l_i+n-D}^{\dots} \sum_{j_{ik}=j_{sa}^{ik}+1}^{\dots} \sum_{j_{sa}=l_{sa}+n-D}^{\dots} \sum_{j_i=l_i+n-D}^{\dots} \sum_{j_i=n+k}^{\dots} \sum_{n_{is}=n+k-j_s+1}^{\dots} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{\dots} \sum_{n_{sa}=n+k_3-j_{sa}+1}^{\dots} \sum_{n_s=n-j_i+1}^{\dots} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l} \sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{l_{sa}-l} \sum_{j_i=l_{ik}+s-l-j_{sa}^{ik}+2}^{l_i-l+1} \frac{(n - j_s)!}{(n + k_1 - n_{is} - n + k_1 - j_s + 1)!} \cdot \frac{n_{is} + j_s - j_{ik} - k_1}{n_{ik} = n + k_2 + k_3 - j_{ik} + 1} \\
& \sum_{n_{sa}=n+k_3-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\)} \sum_{j_s=j_{sa}^{ik}+1}^{(\)} \sum_{l_{ik}+s}^{(\)} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}}^{(\)} \sum_{j_{sa}=j_i+j_{sa}-s}^{(\)} \sum_{j_i=l_i+n-D}^{(\)} \sum_{n_i=n+k}^{(\)} \sum_{n+k-j_s}^{(\)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}^{(\)} \sum_{n_{ik}+j_{ik}+j_{sa}-k_2}^{(\)} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}^{(\)} \frac{(n_i + j_i + j_{sa} - j_{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i + n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j_{sa} - 2 \cdot s)!} \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa} \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_s - j_{sa}^{ik} - l = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(j_i+j_{sa}-s)} \sum_{l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i+1)}^{+j_s-j_i-\mathbb{k}_1}$$

$$\frac{(n_{is}-j_s+1)! \cdot (n_{ik}+j_s-n_{ik}-j_{ik})!}{(j_s-2)! \cdot (n_{is}-n_{is}-j_s+1)!}$$

$$\frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-j_i-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_s+s-l}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{ik}+j_{ik}-j^{sa}+j^{sa}-j_i-k_3)}^{(n_{ik}+j_{ik}-j^{sa}+j^{sa}-j_i-k_3)} \\
 & \frac{(n_{sa}-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}+1)!} \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}+1)!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{ik}-j_{sa}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 & \frac{(n_{sa}-n_s-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}
 \end{aligned}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{()}{j^{sa}=j_i+j_{sa}-s} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_i-k_3}^{j_i-l-k_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_{sa} - j_i - s)!} \cdot \frac{(j_s - l - 1)!}{(j_i - l + 1)! \cdot (j_s - 2)!} \cdot \frac{1}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik} - 1 < j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} - s \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq j_i + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge k = k_1 + k_2 + k_3 > 0$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^{ik}, \dots, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = j_{sa} - k \wedge$$

$$k_2 = s - k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_k} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a} - j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
 & \frac{(l_i + j_{s_a} - l_{s_a} - s)!}{(j^{s_a} + l_i - j_i - l_{s_a})! \cdot (j_i + j_{s_a} - j^{s_a} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{\binom{()}{}} \sum_{(j_s=j_{i_k}-j_{s_a}^{i_k}+1)}^{\binom{()}{}}$$

$$\sum_{j_{i_k}=j_{s_a}^{i_k}+1}^{j^{s_a}+j_{s_a}^{i_k}-j_{s_a}} \sum_{(j^{s_a}=l_i+n+j_{s_a}-D-s)}^{(l_{i_k}+j_{s_a}-l-j_{s_a}^{i_k}+1)} \sum_{j_i=j^{s_a}+s-j_{s_a}}^{l_i-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

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$$\begin{aligned}
& \sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \\
& \frac{(n_{ik} - n_{sa} - l_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - l_2)!} \\
& \frac{(n_{sa} - n_{sa} - l_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_3)!} \\
& \frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!} \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}
\end{aligned}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+l_3}^n \sum_{(n_{is}=n+l_3-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_2+l_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_1}$$

$$\sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \frac{(n - l - 1)!}{(n - l - 1)!} \cdot \frac{(j_s - l - 1)!}{(j_s - l - 1)!} \cdot (j_s - 2)! \cdot \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_i + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}} \frac{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)}{(j^{sa}=l_i+n+j_{sa}-D-s)}$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{is}=n+\mathbb{k}_1-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z^S(j_s, j_{ik}, j_i) = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\begin{aligned}
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!} \cdot \\
& \frac{(l_i - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_s = j_{ik} - j_{sa}^{ik} + 1}^{j_s = j_{ik} - j_{sa}^{ik} + 1} \sum_{j_s = j_{ik} - j_{sa}^{ik} + 1}^{j_s = j_{ik} - j_{sa}^{ik} + 1} \\
& \sum_{j_s = j_{sa}^{ik} + 1}^{j_s = j_{sa}^{ik} + 1} \sum_{j_s = j_{sa}^{ik} + 1}^{j_s = j_{sa}^{ik} + 1} \\
& \sum_{n_{is} = n + \mathbb{k}_2 - j_s + 1}^{n_{is} = n + \mathbb{k}_2 - j_s + 1} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1} \\
& \sum_{n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1}^{n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1} \sum_{n_s = n - j_i + 1}^{n_s = n - j_i + 1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_s = l}^{l_s} \sum_{j_{ik} = l_{ik} - j_{sa}^{ik}}^{l_s + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik} - l + 1} \sum_{j_i = l_i - l + 1}^{l_s + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik} - l + 1} \sum_{n_{is} = n + \mathbb{k}_3 - j^{sa} + 1}^{n} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
\end{aligned}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + \dots)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{lk} - j_{sa}}^{(l_s + j_{sa} - l)} \sum_{(j^{sa} = l_i + n + j_{sa} - l)} \dots$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_s + 1)} \sum_{n_{ik} = \dots + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} - j^{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{(n_{sa} + j^{sa} - j_i - \mathbb{k}_3)}$$

$$\frac{(n_i + j_i + \dots - j^{sa} - 2 \cdot \dots - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n - \dots - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n - j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = l \wedge l_s = D - n - 2 \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + \dots \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \dots + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s - j_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - l_i \leq D + l_s + s - n - 1 \wedge$$

$$\dots \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^l\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-l}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_1}^{n_{is}+j_s-\mathbb{k}-\mathbb{k}_1} \sum_{(n_{ik}+j_{ik}-j_s-\mathbb{k}_2)}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_2} \sum_{(j_i=n-j_i+1)}^{(n_{ik}+j_{ik}-j_s-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

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$$\begin{aligned}
 & \sum_{j_{ik} = l_i + n + j_{sa}^{lk} - D - s}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{lk})}^{(l_{sa} - l + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 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 + k_3 - j_i}^{n_{is} + j_s - j_{ik} - k_1} \\
 & \sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s = j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \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_s - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_s - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 + 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{is} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(l_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{\binom{(\)}{j_s = j_{ik} - j_{sa}^{lk} + 1}} \sum_{\binom{(\)}{j_s = j_{ik} - j_{sa}^{lk} + 1}} \\
 & \sum_{j_{ik} = l_i + n + j_{sa}^{lk} - D - s}^{l_{ik} - l + 1} \sum_{\binom{(\)}{j_s = j_{ik} - j_{sa}^{lk} + 1}} \sum_{j_i = j^{sa} + s - j_{sa}}
 \end{aligned}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - 1)! \cdot (l - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l - l_i)! \cdot (n - j_i - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i \geq l_{ik} \wedge l_{sa} + j_{sa} - s > l_i \wedge$$

$$D + s - n < l_i \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^i < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - k_2)!} \cdot \frac{(n_{sa} - n_{sa} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - s)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

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$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \\
& \frac{(n_s + j_i - n - 1)!}{(n_s - l - 1)! \cdot (j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
& \frac{(l_i + j^{sa} - l_{sa} - s)!}{(j_i + l_i - j_i - l_{sa})! \cdot (j_i + j^{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\cdot)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} f_z^S j_s, j_{sa}, j_i &= \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)} \\ &\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-l+1} \sum_{j_i=l_i+n-D} \\ &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\ &\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ &\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \end{aligned}$$

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \cdot \\
& \frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \\
& \sum_{k=1}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{j=0}^{D-s+1} \frac{(l_{sa} - k - 1)!}{(j_s + j_{sa}^{lk} - 1)!} \frac{(l_i - l + 1)!}{(j_{sa} + j_{sa}^{lk} + j_{sa} - j_{sa}^{lk})!} \frac{(l_i - l + 1)!}{(j_i = j_{sa} + s - j_{sa})!} \\
& \sum_{k=1}^{(n_i - j_s)} \sum_{j=0}^{n_{is} + j_s - j_{ik} - k_1} \frac{(n_i - j_s)!}{(n + k)!} \frac{(n_{is} = n + k - j_s + 1)!}{(n_{ik} = n + k_2 + k_3 - j_{ik} + 1)!} \\
& \sum_{k=1}^{(n_{ik} + j_{ik} - j_{sa} - k_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j_{sa} - j_i - k_3} \frac{(n_{ik} + j_{ik} - j_{sa} - k_2)!}{(n_{sa} = n + k_3 - j_{sa} + 1)!} \frac{(n_{sa} + j_{sa} - j_i - k_3)!}{(n_s = n - j_i + 1)!} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{i=l_i+n-s+1}^{(l_{ik} - j_{sa}^{ik} + 2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}} \sum_{j_{sa}=j_{ik}+j_{sa}-j_s} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk} \sum_{n=n+lk-j_s} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-lk_1}$$

$$\sum_{(n_i+n_{ik}+j_{ik}-j_{sa}-lk_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-lk_3}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa} - 2 \cdot s - lk_1 - lk_2 - lk_3)!}{(n_i + n - lk_1 - lk_2 - lk_3)! \cdot (n + j_i + j_{sa} - j_{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_s - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = lk > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, lk_1, j_{sa}^{ik}, \dots, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-l+1} \sum_{=l_i+n-D}^{(l_i+n-D)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_s+1)}^{(n_{is}+j_s-j_i-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n_{is}-j^{sa}+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(n_{sa}-j^{sa}-1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i-l+1)} \sum_{j_i=j^{sa}+s-j}^{(l_i-l+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j_{ik}+1)}^{n_{sa}+j_s-j_i-k_3} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{ik} + j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)}
 \end{aligned}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{\binom{()}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}}} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{\binom{()}{n_{is}=n+lk-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2}} \sum_{n_s=n_{sa}+j_{sa}-j_i-lk_3}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{lk} - 2 \cdot s - lk_1 - lk_2 - lk_3)!}{(n_i - n - lk_1 - lk_2 - lk_3)! \cdot (n + j_{sa} - j_{sa}^{lk} - s)!}$$

$$\frac{(j_s - l - 1)!}{(j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D)}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{lk} + 1 \wedge j_s < j_{sa}^{lk} - 1 \leq j_{ik} - j_{sa}^{lk} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j_{sa}^{lk} \leq j_i + j_{sa} - s \wedge j_{sa}^{lk} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} - l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$l_{sa} - s - n < l_{sa} \leq D + l_s \wedge s - n - 1 \wedge$$

$$D \geq n < n \wedge l = l_{sa} = 0 \wedge$$

$$j_{sa} < j_{sa}^{lk} - 1 \wedge j_{sa}^{lk} < j_s - 1 \wedge j_{sa}^s = j_{sa}^{lk} - 1 \wedge$$

$$s: \{j_{sa}^s, lk_1, j_{sa}^{lk}, lk_2, \dots, lk_3, j_{sa}^i\} \wedge$$

$$s \leq 6 \wedge s \leq s + lk \wedge$$

$$lk_z: z = 3 \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^{lk}+1}}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_i-1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=j_i-1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s+1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-l-j_{sa}^{ik}+1}
 \end{aligned}$$

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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_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{(l_s - l - 1)! \cdot (l_i - 2)!}{(l_s - j_s - 1)! \cdot (l_i - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_s \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} - l_i + j_{sa} - l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = i > 0 \wedge$$

$$j_s < j_{sa}^{ik} - j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^{ik}\} \wedge$$

$$s \geq 6, j_{sa}^s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j^{s_a} - 1)! \cdot (n_{i_k} + j^{s_a} - n_{s_a} - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a})^{j^{s_a} - l_{i_k}} \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
 & \frac{(l_i + j_{s_a} - l_{s_a} - s)!}{(j^{s_a} + l_i - j_i - l_{s_a})! \cdot (j_i + j_{s_a} - j^{s_a} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_s=j_{i_k}-j_{s_a}^{i_k}+1)}^{()} \\
 & \sum_{j_{i_k}=j^{s_a}+j_{s_a}^{i_k}-j_{s_a}}^{()} \sum_{(j^{s_a}=j_i+j_{s_a}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_i \leq j^{sa} + j_{sa}^{ik} - l_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_s \leq j_i \leq l_i$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, k_3, j_{sa}^i\}$$

$$s \geq 6 \wedge s = \dots + k \wedge$$

$$k_z: z = 3 \wedge k = \dots + k_2 + \dots \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{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_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_{sa} - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_{k_1}}^n \sum_{(n_{is}=n+l_{k_2}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}
 \end{aligned}$$

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$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa} + j_{sa}^{ik} - j_{sa}}^{(j_i + j_{sa} - s)} \sum_{(j^{sa}=j_{sa} + 1)}^{l_s + s - l} \sum_{j_i=s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\begin{aligned}
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - j^{sa} - 1)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
& \frac{(l_i + j_{sa} - l_s - j^{sa} - s)!}{(j^{sa} + l_i - j_s - l_s - j^{sa} - s)! \cdot (j_i + j_s - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \\
& \sum_{k=j^{sa} + j_{sa}^{ik} - j_{sa}}^{(l_{sa} - l + 1)} \sum_{(j^{sa}=j_{sa}+1)}^{l_i - l + 1} \sum_{j_i=l_s + s - l + 1}^{l_i - l + 1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
\end{aligned}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-l_{sa}}^{(n_i-1)} \sum_{j_i=s+1}^{l_s+s-l} \binom{(\cdot)}{j_{sa}^{ik}+1}$$

$$\sum_{n+l_k}^{(n_i-1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(n_{is}=n+l_k-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}^{(\cdot)}$$

$$\frac{(n - j_i + j_{sa} - j^{sa} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n - l - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$n \geq n - l \wedge l \neq i \wedge l \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = l_k > 0 \wedge$$

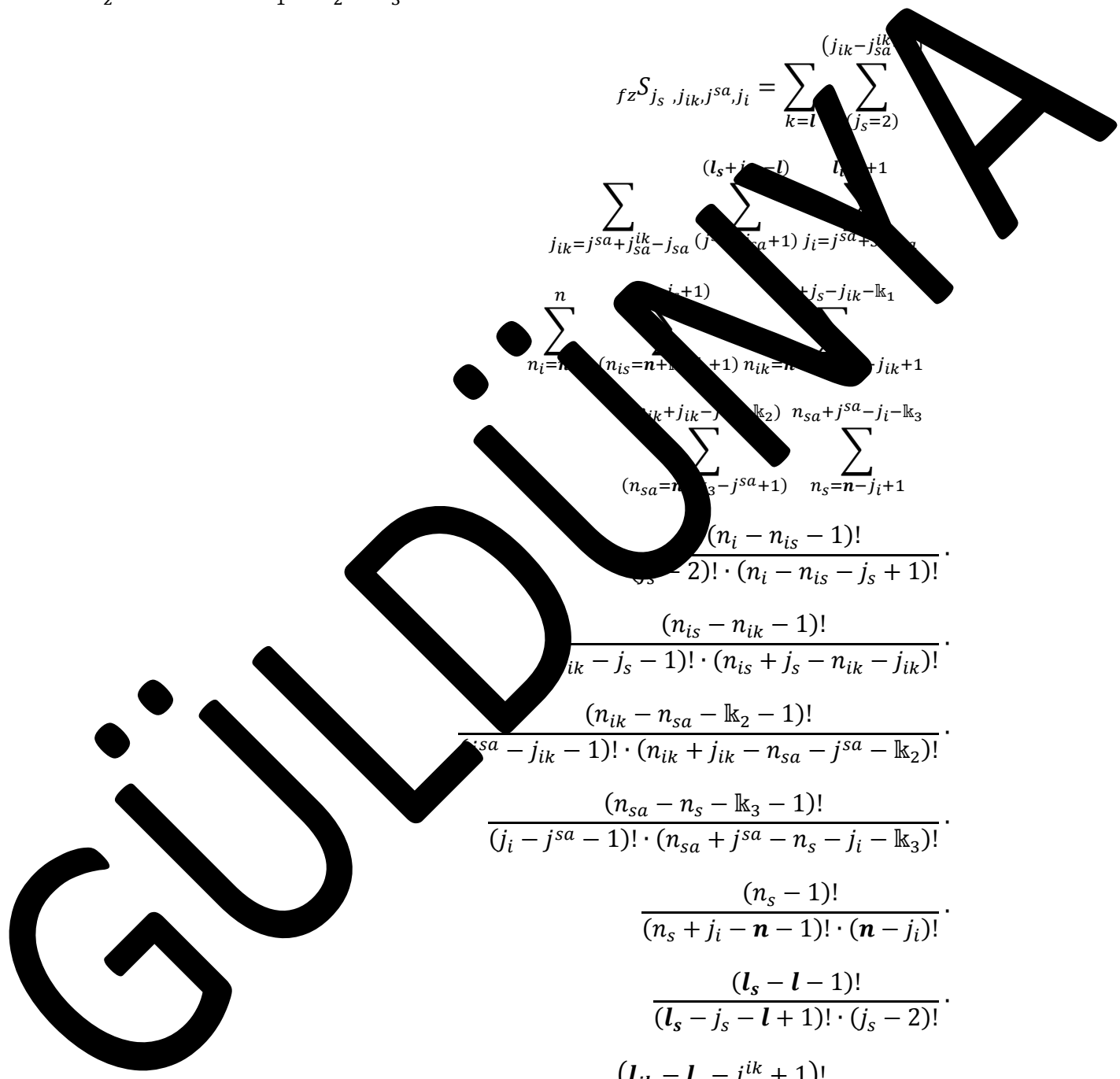
$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_{ik}=j_{sa}^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_s-1)} \sum_{(j_{ik}-j_{sa}^{sa}+1)}^{(l_s+1)} \sum_{n_i=n_{is}+j_{sa}^{sa}+1}^n \sum_{(n_{is}=n_{is}+j_{sa}^{sa}+1)}^{(j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{ik}=n_{is}+j_{sa}^{sa}+1)}^{(j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{ik}+j_{ik}-j_{sa}^{sa}-\mathbb{k}_2)}^{(n_{sa}+j_{sa}^{sa}-j_i-\mathbb{k}_3)} \sum_{(n_{sa}=n_{is}-j_{sa}^{sa}+1)}^{(n_{sa}+j_{sa}^{sa}-j_i-\mathbb{k}_3)} \sum_{n_s=n-j_i+1}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$



$$\begin{aligned}
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_i-l+1)} j_{i+1}^{sa+s-j_{sa}} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+k_2)}^{n_{is}+j_s-k_1} \sum_{(n_{ik}+j_{ik}-j^{sa}-1)}^{(n_{sa}+j^{sa}-j_i-1)} \\
& \frac{(n_{ik}+j_{ik}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-j_i-1)!}{(n_{sa}+k_3-j_s-1)! \cdot (n_{ik}-j_i+1)!} \cdot \frac{(n_{is}-1)!}{(n_{is}-2)! \cdot (n_{is}-j_s+1)!} \\
& \frac{(n_{ik}-1)!}{(n_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
& \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_s-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
& \frac{(n_{sa}-n_s-k_3-1)!}{(j^{sa}-j_s-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j_{sa}=j_{sa}+1)} \sum_{j_i=j_{sa}+s-j_{sa}^{lk}}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-lk_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_1)}^{()} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{lk_1} - lk_2 - lk_3)!}{(n_i - n - lk_1 - lk_2 - lk_3)! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i = 0 + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}^{lk} - j_{sa} \leq j_{sa}^{lk} \leq j_i + j_{sa} - s \wedge j_{sa}^{lk} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge I = lk_1 + lk_2 + lk_3 \wedge$

$j_{sa}^{lk_1} < j_{sa}^{lk_2} - 1 \wedge j_{sa}^{lk_2} < j_{sa}^{lk_3} - 1 \wedge j_{sa}^{lk_3} = j_{sa}^{lk_1} - 1 \wedge$

$s: \{j_{sa}^{lk_1}, j_{sa}^{lk_2}, j_{sa}^{lk_3}, \dots, lk_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s \geq s + lk \wedge$

$z: z = 2 \wedge k = lk_1 + lk_2 + lk_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \binom{(\quad)}{\quad} \sum_{j_i=j_{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \binom{(n_i-j_s+1)}{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n+l_{k_2}+l_{k_3}-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i-l_{k_1}} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{sa}-n_{sa}-j_{sa}-l_{k_2})!} \\
 & \frac{(n_{sa}-l_{k_3}-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-l_{k_3})!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{ik}-l+1} \binom{(\quad)}{\quad} \sum_{j_i=j_{sa}+s-j_{sa}}^{l_i-l+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l}^j \sum_{\substack{(\cdot) \\ (j_s=j_{ik}-j_{sa}^{ik}+1)}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{\substack{(\cdot) \\ (j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_s \leq n$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_i \wedge l_i + j_s - s > l_s \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_s - l_{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(l_i + j_i - l_{sa} - s)!}{(j^{sa} + l_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{()}{}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_{z, \dots, j_{ik}, j_{sa}, j_{sa}^i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_i + j_{sa} - s)} \sum_{(j_{ik}=j^{sa} + j_{sa}^{ik} - j_{sa})}^{(j^{sa} = l_{sa} + n - D)} \sum_{(j_i = l_i + n - D)}^{(l_s + s - l)} \sum_{(i=n+k)}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + k - j_s + 1)}^{(n_{is} + j_s - j_{ik} - k_1)} \sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - k_3)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!}$$

$$\frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_s=2}^{l_s-l+1} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}^{sa}=l_{sa}+n-D}^{n+l_s} \sum_{j_{is}=n+l_s-j_s+1}^{n+l_s} \sum_{n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{n_{sa}=n+l_{k_3}-j_{sa}+1}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{j_s=j_{ik}^{(k)}+1}^{()}$$

$$\sum_{j_{ik}=j^{sa}+1}^{()} \sum_{(j^{sa}=j_i+s)}^{()} \sum_{j_i=l_i+n-D}^{()}$$

$$\sum_{n_i=n+k_1}^{()} \sum_{n_i=n+k_2-j_s}^{()} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}^{()}$$

$$\sum_{(n_{ik}=n_{ik}+j_{ik}^{(k)}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}^{()}$$

$$\frac{(n_i + j_i + j_s - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i + n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$n \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_i+n+j_{sa}-D-s-1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-l+1} \sum_{l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i-1)}^{(n_i+j_s-j_i-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_2+n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \sum_{j_i+1}^{(n_{sa}-j^{sa}+1)}$$

$$\frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-j_i-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

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$$\sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{ik}}^{l_i-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j^{sa}-n_{ik}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j^{sa}-1)! \cdot (n_s=n-j_i+l_{k_3}-j^{sa}-1)!}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}-n_{ik}-j_s+1)!}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!}$$

$$\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_2}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-n_{is}+n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)!(n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}
 \end{aligned}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{(l_s - l - 1)! \cdot (l - 2)!}{(l_s - j_s - 1)! \cdot (l - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} + j_{sa} - s > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + j_i - n - 1$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_i-n_{is}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-k_2)!} \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \cdot \frac{(n_s-1)!}{(n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-j_{ik}-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_{sa}-s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - l - 1)!}{(n - l - 1)! \cdot (j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i - j_{sa} - l_{sa} - s)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i=j^{sa} + s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - j^{sa} - 1)! \cdot (j_{ik} - j_s - j^{sa} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - j_{sa} - l_s - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+1}^{j_{sa}^{ik}-l} \sum_{j_{sa}^{ik}=D-s}^{(\cdot)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{sa}, j_{sa}^{ik}, j_i} = \sum_{k=l}^{l_i+n-D-s} \sum_{(j_s=2)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j_i=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_{is}=n+\mathbb{k}-j_s+1}^n \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_i - l_s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{j_s=l_i+n-D-s}^{l_s-l} \frac{(l_s-l)!}{(j_s+l_i+n-D-s)!} \cdot \\
 & \sum_{j_{ik}=j_s+l_{ik}-1}^{l_{ik}-l+1} \frac{(l_{ik}-l+1)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_{ik}-j_s-j_{sa}^{ik})!} \cdot \\
 & \sum_{n_{is}=n+l_{ik}-j_s-1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \frac{(n_{is}+j_s-j_{ik}-l_{k_1})!}{(n_{is}=n+l_{ik}-j_s-1)!} \cdot \\
 & \sum_{n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1} \frac{(n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1)!}{(n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1)!} \cdot \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{sa}=n+l_{k_3}-j^{sa}+1)} \frac{(n_{sa}+j^{sa}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j^{sa}+1)!} \cdot \\
 & \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \frac{(n_s+n-j_i+1)!}{(n_s=n-j_i+1)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+...}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_{sa}=j_{ik}+j_{sa}^{sa}-1)}^{()} \sum_{(j_i=j_{sa}^{sa}-j_{sa})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}+j_s-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-k_2)}^{()} \sum_{(n_{sa}+j_{sa}-j_i-k_3)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa} - 2 \cdot k_1 - k_2 - k_3)!}{(n_i - k_1 - k_2 - k_3)! \cdot (n_i + j_i + j_{sa} - j_{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_i = l \wedge l_s = D - n - 1 \wedge$$

$$D + j_i + s - n - l_i - 1 \leq l \leq l - 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$j_{sa} - s < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

$$j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa} \quad (j^{sa} = l_{sa} + n - D) \quad \sum_{(j_s=2)}^{(l_{sa}-l+1)} \sum_{(j_s=2)}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_s+1)}^{(n_{is}+j_s-j_i-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_2-j^{sa}+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(j_s=2)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_1)}^{()} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i = 0 + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_{sa}^{ik} < j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k_1 = 0 \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_s - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, k_1, j_{sa}^{ik}, j_{sa}^s, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k: z = 2 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{()}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_s+s-1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_i}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-2)!(n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j_{sa}-k_2)!} \cdot \\
 & \frac{(n_{sa}-n_s-k_3-1)!}{(j_i-n_{sa}-1)!(n_{sa}+j_{sa}-n_s-j_i-k_3)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)!(n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)!(j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)!(j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})!(j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)!(n-j_i)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j_{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i = n + k}^n \sum_{(n_{i_s} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{i_k} = n + k_2 + k_3 - j_{i_k} + 1}^{n_{i_s} + j_s - j_{i_k} - k_1} \\
 & \sum_{(n_{s_a} = n + k_3 - j^{s_a} + 1)}^{(n_{i_k} + j_{i_k} - j^{s_a} - k_2)} \sum_{n_s = n - j_i + 1}^{n_{s_a} + j^{s_a} - j_i - k_3} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - k_2)!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j^{s_a} - 1)! \cdot (n_{i_k} + j^{s_a} - n_s - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_{i_k} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a} - j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_s = j_{i_k} - j_{s_a}^{i_k} + 1)}^{()} \\
 & \sum_{j_{i_k} = j^{s_a} + j_{s_a}^{i_k} - j_{s_a}}^{()} \sum_{(j^{s_a} = j_i + j_{s_a} - s)}^{()} \sum_{j_i = s + 1}^{l_s + s - l} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{i_s} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{i_k} = n_{i_s} + j_s - j_{i_k} - k_1}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_s \leq n$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s = l_s \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_i - l + 1)! \cdot (l - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa} + 1)!} \cdot \\
& \frac{(n_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+l_k-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
\end{aligned}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik} + 1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{l_s+j_{sa}-l} \sum_{j_{sa}=j_{sa}+1}^{j_{sa}} \sum_{j_i=j_{sa}+s-j_{sa}}^{n} \sum_{l_i=n+\mathbb{k}_1}^{n} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(n_i-j_s+1)} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{sa} - j_{sa}^{ik} + 1)} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{sa}^{ik} + 1}^{(l_{sa} - l + 1)} \sum_{j_i = s - j_{sa}}^{(j_i - j_s + 1)} \sum_{n_i = n + k}^{(n_i + j_s - j_{ik} - k_1)} \sum_{n_{ik} = n + k_2 + k_3 - j_{ik} + 1}^{(n_{ik} + j_{sa} - k_2)} \sum_{n_{sa} = n + k_3 - j_{sa} + 1}^{(n_{sa} + j_{sa} - j_i - k_3)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\begin{aligned}
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik} = l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa})}^{(l_{sa} - l + 1)} \sum_{(j_{sa} = j_{sa})}^{(l_s - l + 1)} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n - k)}^{(n_i - j_s + 1)} \sum_{(n_{is} + j_s - j_{ik} - k)}^{(n_{is} + j_s - j_{ik} - k)} \\
 & \sum_{(n_{ik} + j_{sa} - k_2)}^{(n_{ik} + j_{sa} - k_2)} \sum_{(n_{sa} = n - k_3 - j_i + 1)}^{(n_{sa} = n - k_3 - j_i + 1)} \\
 & \sum_{(n_s = n + k_3 - j_s)}^{(n_s = n + k_3 - j_s)} \sum_{n_s = n - j_i + 1}^{(n_s = n - j_i + 1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j^{sa}+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\cdot)} \sum_{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq l \wedge l_i \leq l + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq l_s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa} + j_{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq l < n \wedge l = l_{k_1} + l_{k_2} + l_{k_3} \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq l + l_{k_1} \wedge$$

$$l_{k_1} + l_{k_2} + l_{k_3} = l \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_2+l_3-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_k+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}+1)!}{(j_{ik}-j_s+1)!(n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)!(n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{lk}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{lk}+1)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{lk}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{lk}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}
 \end{aligned}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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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_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{(l_s - l - 1)! \cdot (j_s - 2)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_i > l_{ik} \wedge l_{sa} + j_{sa} - s = l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + j_i - n - 1$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\)} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_i-n_{is}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-k_2)!} \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \cdot \frac{(n_s-1)!}{(n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-j_{ik}-j_{sa}^{ik}+1)!}{(j_s+l_{sa}-j_{ik}-l_{ik})! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} + j_{sa} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa} - l_s) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_s - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_i+n-D}^{l_s+s-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} f_z S_{j_s, j_{sa}, j_i} &= \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)} \\ &\sum_{j_{ik}^{sa} - j_{sa}^{ik} - j_{sa}}^{(l_s + j_{sa} - l)} \sum_{j_i = j^{sa} + s - j_{sa}} \\ &\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 + k_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \\ &\sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - k_3} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l + 1)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_s + 1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(n - l_i)!}{(n - l_i - j_s + 1)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s=2)}^{(j_s-l+1)} \\
 & \sum_{i_{ik}=l_{ik}}^{l_{ik}-l+1} \sum_{(i_{is}=n-l-s+1)}^{(l_i-n-l-s+1)} \sum_{(j_i=j^{sa}+s-j_{sa})} \\
 & \sum_{(n+l_{ik})}^{(n_{is}=n+l_{ik}-j_s+1)} \sum_{(n_{ik}=n+l_{ik_2}+l_{k_3}-j_{ik}+1)}^{(n_{is}+j_s-j_{ik}-l_{k_1})} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_3})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_s+1} \frac{(n - j_s)!}{(n - j_s - l)! \cdot (j_s - 2)!}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-1}^{j_{ik}+1} \sum_{j_{sa}=l_i+l_{sa}-D-s}^{j_{sa}+1} \sum_{j_i=j^{sa}+s-j_{sa}}^{j_i+1} \frac{(n - j_i)!}{(n - j_i - l)! \cdot (j_i - 2)!}$$

$$\sum_{n+l_{ik}+l_{sa}+j_{sa}^{ik}-1}^n \sum_{(n_{i_s}=n+l_{i_s}-j_s+1)}^{j_s+1} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}}^{j_s+1} \frac{(n - j_s)!}{(n - j_s - l)! \cdot (j_s - 2)!}$$

$$\sum_{n_{sa}=n_{i_k}+j_{i_k}-j^{sa}-l_{k_2}}^{j_s+1} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}^{j_s+1} \frac{(n - j_s)!}{(n - j_s - l)! \cdot (j_s - 2)!}$$

$$\frac{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z^S j_s, j_{ik}, j_{sa}, j_i = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_{sa}=l_i+n+D-s)}^{(l_i+j_{sa}-l-s)} \sum_{j_i=j_{sa}+s}^{(j_i+1)}$$

$$\sum_{n_i=n}^{n} \sum_{(n_{is}=n+1)}^{(n_i+1)} \sum_{n_{ik}=n}^{(n_{ik}+1)} \sum_{(n_{sa}+j_{sa}-j_i-\mathbb{k}_2)}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n_{sa}-j_{sa}+1)}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{(n_s+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{j_{i+1}=j^{sa}+j_{sa}}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3+1}^{n_{is}+j_s-k_1} \\
 & \sum_{(n_{sa}=k_3-j_{sa}^{ik})}^{(n_{ik}+j_{ik}-j_{sa}^{ik})} \sum_{j_{i+1}}^{(n_{sa}+j_{sa}-j_i-k_3)} \\
 & \frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j_{ik}+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{(n_s=n-j_i)}^{n_{sa}+j_{ik}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{ik} + j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \\
 & \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}
 \end{aligned}$$

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$$\sum_{j_{ik}=l_i+n+j_{sa}^{lk}-D-s}^{l_s+j_{sa}^{lk}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-lk_3}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s - lk_1 - lk_2 - lk_3)!}{(n_i - n - lk_1 - lk_2 - lk_3)! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - s - n + l_i)!}{(D + j_{sa} - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{ik} + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} - j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} > l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq l_i + l_s + s - n = D$

$D > n < n \wedge lk = lk > 0$

$j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} - j_{sa}^{ik} - 1 = j_{sa}^{ik} - 1 \wedge$

$\{j_{sa}^{ik}, lk_1, j_{sa}^{ik}, \dots, lk_2, j_{sa}^{ik}, \dots, lk_3, j_{sa}^{ik}\} \wedge$

$s \geq 6 \wedge s = s - lk_1 - lk_2 - lk_3$

$lk_2 - lk_2 = s - lk = lk_1 + lk_2 + lk_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_k} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_{i_k} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s + l_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a} - j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \\
 & \sum_{j_{i_k}=j_s+j_{s_a}^{i_k}-1}^{l_{i_k}-l+1} \sum_{(j^{s_a}=j_{i_k}+j_{s_a}-j_{s_a}^{i_k})}^{(l_i+j_{s_a}-l-s+1)} \sum_{j_i=j^{s_a}+s-j_{s_a}}^{(l_i+j_{s_a}-l-s+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}}
 \end{aligned}$$

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$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - l_{k_2})!} \cdot \frac{(n_{sa} - n_{ik} - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - l_{ik} - j_{sa}^{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_{k_3}}^n \sum_{(n_{is}=n+l_{k_3}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

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$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_i - l + 1)! \cdot (l_s - j_i - l - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j^{sa} + 1)!}{(j_s + l_{ik} - j^{sa} - l_{ik} - 1)! \cdot (j_{ik} - j^{sa} - j^{ik} + 1)!} \cdot \\
 & \frac{(n_{sa} + j^{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_s + j^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_s+s-l+1}^{l_{sa}+s-l-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_s)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_{ik} = j_i + j_{sa}^{ik} - j_{sa}}^n \sum_{j_s = j_{ik} - j_{sa}^{ik} + 1}^{l_s + s - l} \sum_{j_i + j_{sa} - s}^{l_s + s - l} \sum_{j_i = l_{sa} + n + s - D - j_{sa}}^{l_s + s - l} \\
& \sum_{l_i = n + \mathbb{k}_1}^n \sum_{(n_i = n + \mathbb{k}_1 - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s + 1)} \\
& \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{()} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

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$$fz^S j_s, j_{ik}, j_{sa}^{ik} = \sum_{l=1}^{k+1} \sum_{(j_s=2)}^{k+1} \frac{j_{sa} + j_{sa}^{ik} - j_{sa}}{(l_s + j_s)} \sum_{j_{ik}=l_{ik} - D}^{(j_{sa} = n - D)} \sum_{j_i=j_{sa} + s - j_{sa}}^{(n - D)} \frac{(n_i - 1)!}{(n_{is} = n + k_1 + 1) (n_{ik} = n + k_2 + k_3 - j_{ik} + 1)} \frac{(l_s + j_s - j_{ik} - k_1)}{(n_{ik} + j_{ik} - j_{sa} - k_2)} \frac{n_{sa} + j_{sa} - j_i - k_3}{(n_{sa} = n + k_3 - j_{sa} + 1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l_i}^{(l_s - l + 1)} \sum_{s=2}^k$$

$$\sum_{j_{ik}=l_{ik}+n}^{l_{ik}-l+1} \sum_{n_{sa}=l_s+j_{sa}-l}^{(l_s-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{sa}=n+l_k-j_s+1}^{(n_{sa}+1)} \sum_{n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}^{(n_{ik}+1)}$$

$$\sum_{n_{sa}=n+l_{k_3}-j^{sa}+1}^{(n_{ik}+j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j_{sa}=l_{sa}+n-D)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=j_s+1)} \sum_{(n_{ik}=j_s-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-k_2)}^{(\)} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i-k_3)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa} - 2 \cdot k_1 - k_2 - k_3)!}{(n_i - k_3)! \cdot (n_i + j_i + j_{sa} - j_{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n - 1 \wedge$$

$$1 \leq j_{sa} < j_{ik} - j_{sa} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{sa} + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - 1 \wedge l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$l_s \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_{sa}-l+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-\mathbb{k}-\mathbb{k}_1}^{n_{is}+j_s-\mathbb{k}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{(j^{sa}+1)}^{n_{sa}+j^{sa}-\mathbb{k}_3} \sum_{(n_{is}-n_{ik}-1)}^{(n_{is}-n_{ik}-1)}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

GÜLDÜZMİNAR

$$\begin{aligned}
 & \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_i}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i-k_1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{sa}-n_{sa}-j_{sa}-k_2)!} \cdot \frac{(n_{sa}-k_3-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-k_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}
 \end{aligned}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{ik})!} \cdot \\
 & \frac{(n_{i_k} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{i_k} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_{i_s} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l}^{\binom{D}{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{\binom{D}{j^{sa}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_s \leq n$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - j_{sa}^s = j_{sa} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + 1 \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k}_z = \mathbb{k}_1 + \dots + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_s - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l - 1)} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)} \\
 & \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(l_{sa} - l + 1)} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}
 \end{aligned}$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - j^{sa} - 1)! \cdot (j_{ik} - j_s - j^{sa} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik} - 1)! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} & \sum_{j_s=1}^{j_{ik}-j_{sa}^{ik}+1} \sum_{j_{ik}=j_s}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\ & \sum_{j_{ik}=l_{ik}-l+1}^{l_{ik}-l+1} \sum_{j_{sa}=j_i+j_{sa}-s}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\ & \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\ & \sum_{n_{sa}=n+k_3-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{l_s+l-s-l} \sum_{j_{ik}=j_s+l_{sa}^{ik}-j_{sa}}^{l_s+l-s-l} \sum_{j_i=j_s+l_{sa}^{ik}-j_{sa}}^{l_s+l-s-l} \sum_{n+l_k}^n \sum_{n_{is}=n+l_{sa}^{ik}-j_{sa}+j_s+1}^{j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}} \frac{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D - n - l_i \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l_i \leq l_i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_Z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{j_s=2}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=l_{ik}+1}^{l_{ik}-l+1} \sum_{(j_{sa}=l_{sa}+n)}^{(j_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i=n+k-1)} \sum_{j_{ik}=n+k_2+k_3-j_{ik}+1}^{(n_i=n+k-1)} \sum_{(n_{ik}=n_{ik}-j_{sa}-k_2)}^{(n_{sa}+j_{sa}-j_i-k_3)}$$

$$\sum_{(n_{sa}=n_{sa}-j_{sa}+1)}^{(n_{sa}=n_{sa}-j_{sa}+1)} \sum_{n_s=n-j_i+1}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_s - l + 1)} \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{()} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{()} \sum_{j_{sa}^{sa} + s - j_{sa}}^{()} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + 1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n_{is} + j_{sa} - k_1)}^{()} \sum_{(j^{sa} = n_{ik} + j_{sa} - k_2 - k_3)}^{()} \sum_{(j_{sa}^{sa} - j_i - k_3)}^{()} \frac{(n_i + j_i + j_{sa} - j_{sa}^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j_{sa}^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$

$D + l_s + s - l_i + 1 \leq l \leq l - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{ik} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa}^{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$\begin{aligned}
 f_{zS} S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)} \\
 &\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{ik}}^{l_{sa}+s-l-j_{sa}+1} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k-k_2-k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 &\frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j_{sa}-j_i-k_3)!}{(n_{sa}+n+k_3-k_2-k_1+1)! \cdot (n_s-n-j_i-k_3)!} \\
 &\frac{(n_i-n-k_1-1)!}{(j_s-2)! \cdot (n_{ik}-j_s+1)!} \\
 &\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{ik}+j_s-n_{ik}-j_{ik})!} \\
 &\frac{(n_{ik}-n_s-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 &\frac{(n_{sa}-n_s-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 &\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 &\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 &\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}
 \end{aligned}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_i+j_{sa}-s}} \sum_{l_s+s-l}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+\mathbb{k}-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{sa} - j_i - s)!}$$

$$\frac{(j_s - l - 1)!}{(j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_s - n - l_i)! \cdot (n - j_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$(D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n)$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{sa} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1)$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_s - s + 1 \leq l_s \wedge$

$l_i \leq D + s - n$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$l < j_i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$\begin{aligned}
fz^{\mathcal{S}}_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
&\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s}^{l_s+s-l} \\
&\sum_{n_i=n+l}^n \sum_{(n_{is}=n+l-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l-k_2}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_{sa}=n+l-k_3}^{n_{ik}-j_{ik}+1} \sum_{n_s=n-j_i+k_3}^{n_{ik}+j_{ik}-j^{sa}-k_2} \sum_{n_s=n-j_i+k_3}^{n_{sa}+j^{sa}-j_i-k_3} \\
&\frac{(n_{is}-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \cdot \\
&\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \cdot \\
&\frac{(n_{ik}-n_{sa}-k_2-1)!}{(n_{ik}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \\
&\frac{(n_{sa}-n_s-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \cdot \\
&\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
&\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
&\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
&\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
&\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
&\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{sa}-l+1)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{ik}+j_{ik}-j^{sa})}^{(n_{sa}+j_{ik}-j_i-k_3)} \\
 & \sum_{(n_{sa}=n+k_3-j_{ik}+1)}^{(n_{sa}+j_{ik}-j_i-k_3)} \sum_{n_s=n-j_i} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDENYA

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=s}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_1)}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (j_i + j_{sa} - s - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(D - n - l_s > n) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^l\} \wedge$$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-l)} \sum_{j_i=l-s-j_{sa}}^{l-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i)}^{(j_s-j_i-\mathbb{k}_1)}$$

$$\frac{(n_{sa}=n+\mathbb{k}_2-j^{sa}+1) \cdot (n_s+j_s-j_i-\mathbb{k}_3)}{(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

$$\frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-j_i-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}$$

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$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_{i+1}^{sa+s-j_{sa}}=1}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+k_2)}^{n_{is}+j_s-k_1} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j^{sa}-j_i-k_1)!}{(n_{sa}+k_3-j_s-k_1)! \cdot (n_{ik}-j_i+1)!} \cdot \frac{(n_{is}-1)!}{(n_{is}-2)! \cdot (n_{is}-j_s+1)!} \\
 & \cdot \frac{(n_{ik}-1)!}{(n_{is}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_s-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 & \cdot \frac{(n_{sa}-n_s-k_3-1)!}{(j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \\
 & \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j_{sa}^{sa}=j_{sa}+1)} \sum_{j_i=j_{sa}^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_1})}^{()} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{sa} - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\left((D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge \right.$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} + j_i + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} + j_{sa}^{lk} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} + j_i + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(D - n - l_i - n) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{sa} = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^l\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i)}^{(n_{is}-j_s+\mathbb{k}_1)}$$

$$\frac{(n_{sa}=n+\mathbb{k}-j_s+1) \cdot (n_{is}-j_s+1) \cdot (n_{ik}+j_s-n_{ik}-j_{ik})!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik}=l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j_{sa}=j_{ik} + j_{sa} - j_{sa}^{ik})}^{(l_{sa} - l + 1)} \sum_{j_{sa}^{sa} + s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+k_2}^{n_{is} + j_s - k_1} \\
 & \frac{(n_{ik} + j_{ik} - j_{sa}^{sa})! \cdot (n_{sa} + j_{sa} - j_i - k_1)!}{(n_{sa} + k_3 - j_{sa}^{sa})! \cdot (n_{sa} - j_i + 1)!} \\
 & \frac{(n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{ik} - 1)!}{(n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_{sa} - j_{sa}^{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa}^{sa} - l_{ik})! \cdot (j_{sa}^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa}^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa}^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j^{sa}+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\cdot)} \sum_{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_i + j_{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} + j_{sa} - j_{sa}^{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_{sa} \wedge$$

$$(l_i - s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+j_{sa}^{ik}-\mathbb{k}_1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_s+j_{sa}^{ik}-\mathbb{k}_2)}^{(n_{is}+j_s-j_{sa}^{ik}-\mathbb{k}_1)}$$

$$\frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j^{sa}-j_{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

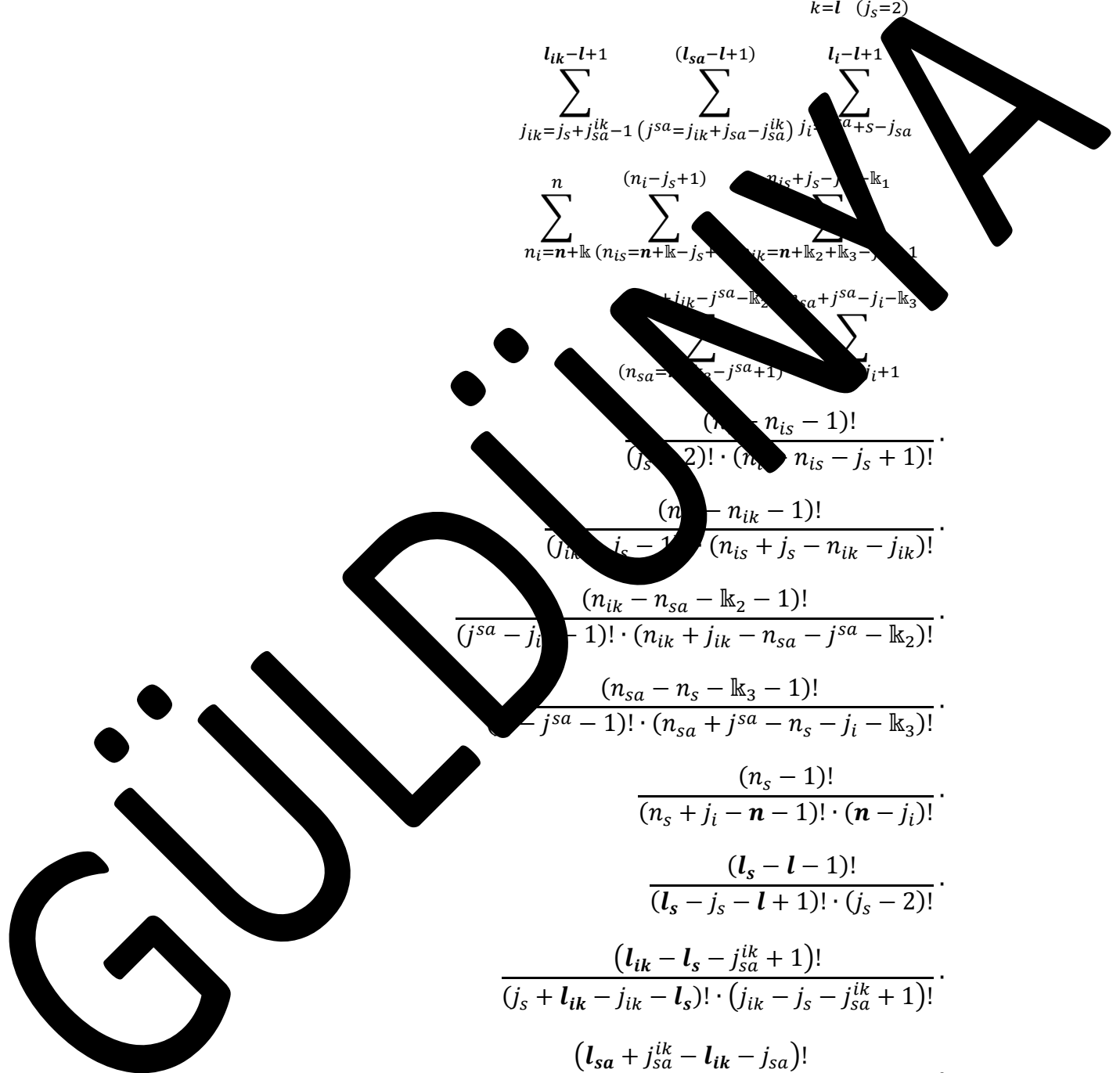
$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}$$



$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \sum_{j_{ik}=j_s + j_{sa}^{ik} - 1}^{(j_{sa}=j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_{sa}^{sa} + s - j_{sa}}^{(j_{sa}^{sa} + s - j_{sa})} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n_{is} + j_{sa} - k_1}^{(n_{is} + j_{sa} - k_1)} \sum_{(j_{sa}=n_{ik} + j_{sa} - k_2)}^{(j_{sa} - k_2)} \sum_{(j_{sa}^{sa} - j_i - k_3)}^{(j_{sa}^{sa} - j_i - k_3)} \frac{(n_i + j_i + j_{sa} - j_{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j_{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_i \neq l \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & D + s - n < l_i \leq D + l_s + s - n - 1) \vee \\ & ((D \geq n < n \wedge l_i \neq l \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_i - s + 1 > l_s \wedge \\ & D + s - n < l_i \leq D + l_s + s - n - 1) \wedge \\ & D \geq n < n \wedge l = k > 0 \wedge \end{aligned}$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z^S j_s, j_{ik}, j_{sa}, j_i = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_{ik}=l_{ik}+n-D}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_i=l_i-s)}^{(j_i=l_i-s)} \sum_{(j_s=l_s)}^{(j_s=l_s)} \sum_{n_i=n}^n \sum_{(n_{is}=n+l_{is}+1)}^{(n_{is}=n+l_{is}+1)} \sum_{(n_{ik}=n)}^{(n_{ik}=n)} \sum_{(n_{sa}+j_{sa}-j_i-\mathbb{k}_2)}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_2)} \sum_{(n_{sa}=n-\mathbb{k}_3-j_{sa}+1)}^{(n_{sa}=n-\mathbb{k}_3-j_{sa}+1)} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\begin{aligned}
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{j_s=2}^{l_s - l + 1} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{j^{sa}=l_{sa}}^{(l_{sa}-l+1)} \sum_{j_i=l_s-l+1}^{l_s-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{n_{is}=n_{is}+j_s-j_{ik}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{sa}+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
 & \frac{(n_{ik} - j^{sa} - k_2 - 1)!}{(n_{ik} - j^{sa} - k_2 - 1)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(n_{is} - n_{ik} - 1)!} \cdot \frac{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}{(n_{ik} - n_{sa} - k_2 - 1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{ik} - n_{sa} - k_2 - 1)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜŞMÜŞA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\)} \sum_{(l_s+s=l_i+n-D)}^{l_s+s} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-k_1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_s-k_2)}^{(n_i-j_s+1)} \sum_{(n_{sa}-k_3)}^{(n_i-j_s+1)} \frac{(n_i + j_i + j_{sa} - j_s - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j_s - 2 \cdot s)!} \frac{(l_s - l - 1)!}{(l_s + j_s - l + 1)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_i \neq l \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_i - j_{sa}^{ik} + 1 > l_s \wedge l_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & D + s - n < l_i \leq D + l_s + s - n - 1) \vee \\ & (D \geq n < n \wedge l_i \neq l \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_i - s + 1 > l_s \wedge \\ & D + s - n < l_i \leq D + l_s + s - n - 1) \wedge \\ & D \geq n < n \wedge l_i = k > 0 \wedge \end{aligned}$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z^S j_s, j_{ik}, j_{sa}, j_i = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_{ik}=l_{ik}+n-D}^{j_{sa}+j_{sa}^{ik}-j_{sa}-(l_i+n+j_s-(s-1))} \sum_{(j_{sa} \geq l_{sa}+n-D)}^{(l_i+n+j_s-(s-1))} \sum_{j_i=l_i+1}^{(l_i+n+j_s-(s-1))} \sum_{n_i=n}^{(n_i=n+l_{sa}+1)} \sum_{(n_{is}=n+l_{sa}+1)}^{(n_i+n+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{ik}=n)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=n)}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \sum_{n_s=n-j_i+1}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\begin{aligned}
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)} \\
& \sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D)}^{(l_s+j_{sa}-l)} \sum_{(j_s=2)}^{l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik}-1)}^{n_{is}+j_s-j_{ik}-1} \\
& \sum_{(n_{ik}+j_{ik}-j^{sa}-l_{k2})}^{(n_{ik}+j_{ik}-j^{sa}-l_{k2})} \sum_{(j_i-l_{k3})}^{(j_i-l_{k3})} \\
& \sum_{(n_s=n+l_{k3}-j^{sa}-1)}^{(n_s=n+l_{k3}-j^{sa}-1)} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k2} - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k2})!} \cdot \\
& \frac{(n_{sa} - n_s - l_{k3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k3})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_{is}^{sa+s-j_{sa}}}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{is})}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+l_k-j_{ik})}^{n_{is}+j_s-l-k_1} \\
 & \frac{(n_{ik}+j_{ik}-j_{is}^{sa})! \cdot (n_{sa}+j_{sa}-j_{is}^{sa})!}{(n_{sa}+l_k+1)! \cdot (n_{is}-j_i+1)!} \\
 & \frac{(n_{ik}-n_{is}-1)!}{(n_{is}-2)! \cdot (n_{is}-j_s+1)!} \\
 & \frac{(n_{is}-n_{ik}-1)!}{(n_{is}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-l_k-1)!}{(j^{sa}-j_{is}^{sa}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_k)!} \\
 & \frac{(n_{sa}-n_s-l_k-1)!}{(j_{is}^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_k)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

GÜLDÜZ

$$\sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} (j^{sa}=l_i+n+j_{sa}-D-s) \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_1)}^{()} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\left((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge \right.$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} + j_{sa}^{lk} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{sa} + j_{sa}^{lk} - j_{sa} > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_{sa}=l_{sa}-D)}^{(l_{sa}-l+1)} \sum_{j_i=n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n_0+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}}$$

$$\frac{(n_{ik}-j_{sa}-k_2-1)!}{(n_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-k_2)!}$$

$$\frac{(n_{sa}-n_s-k_3-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-k_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=l+1)}^{(l_{sa}-l+1)} \sum_{j_{is}=j_{sa}-j_{sa}^{ik}}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3+1}^{n_{is}+j_s-k_1} \\
 & \sum_{(n_{sa}=k_3-j_{sa}^{ik})}^{(n_{ik}+j_{ik}-j_{sa}^{ik})} \sum_{(j_i+1)}^{(n_{sa}+j_{sa}-j_i-k_3)} \\
 & \frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \\
& \sum_{j_{ik}=l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j_{sa}=j_{ik} + j_{sa} - j_{sa}^{ik})}^{(l_{sa} - l + 1)} \sum_{j_{sa}^{sa} + s - j_{sa}}^{l_i - l + 1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k - j_{sa}^{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+l_{k_2}}^{n_{is} + j_s - l_{k_1}} \\
& \frac{(n_{ik} + j_{ik} - j_{sa}^{ik})! \cdot (n_{sa} + j_{sa} - j_i - l_i)!}{(n_{sa} + l_{k_3} - j_{sa}^{ik})! \cdot (n_{sa} - j_i + 1)!} \\
& \frac{(n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
& \frac{(n_{ik} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik} - l_{k_2})!} \\
& \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - l_{k_3})!} \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa}^{ik} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa}^{ik} - s)!} \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
\end{aligned}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j_{sa}+s-}^{(\cdot)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k_1}}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{(\cdot)} \sum_{(n_{sa}+j_{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\left((D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge \right.$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} + j_{sa} - j_{sa}^{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j_{sa}=n-D)}^{(l_{sa}-l+1)} \sum_{j_i=n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-n)}^{(n_{is}+j_s-n)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(l_{sa} - l + 1)} \sum_{j_{sa}^{sa} = j_s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2}^{n_{is} + j_s - k_1} \\
 & \frac{(n_{ik} + j_{ik} - j_{sa}^{ik})! \cdot (n_{sa} + j^{sa} - j_i - k_1)!}{(n_{sa} + k_3 - j_s - k_2)! \cdot (n_{sa} - k_3 - j_s - k_2)!} \\
 & \frac{(n_{is} - 1)!}{(n_{is} - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{ik} - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{ik}}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_1)}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (j_i - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \vee$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D > n \leq n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_Z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{j_s=2}^{(l_s-l+1)} 1$$

$$\sum_{j_{ik}=l}^{l_{ik}-l+1} \sum_{(j_{sa}=l_{sa}-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{(l_i+n-D)} 1$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i+n+\mathbb{k}-j_s+1)}^{(n_i+n+\mathbb{k}+1)} \sum_{j_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_i+n+\mathbb{k}+1)} 1$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j_{sa}+1)}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \sum_{n_s=n-j_i+1}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} 1$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+...)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}^{ik}-j_s)}^{()} \sum_{(j_i=j^{sa}-j_{sa})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=j_s-j_{ik}-k_1)}^{(n_i-j_s+1)} n_{ik}$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}-k_2)}^{()} \sum_{(n_{sa}+j^{sa}-j_i-k_3)}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - k_1 - k_2 - k_3)! \cdot (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_i = l \wedge l_i \leq D + s - 1 \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - k_1 + 1 = j_i + j_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_i < j_i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^n \sum_{l=1}^{(j_s)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=1}^{l_i - l + 1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2+j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)}$$

$$\sum_{n_{ik}+j_{ik}-j^{sa}-k_2} \sum_{(j^{sa}=j^{sa}-k_3)}$$

$$\sum_{n_{sa}=n+k_3-j^{sa}} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_{ik}-1)!}{(j_{ik}-1)! \cdot (n_i-j_{ik}-k_1+1)!}$$

$$\frac{(n_{sa}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_i+j_{ik}-j^{sa}-k_2)!}$$

$$\frac{(n_{sa}-n_{sa}-k_3-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_i+j^{sa}-n_s-j_i-k_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(l_i+j_{sa}-j_i-l_{sa})! \cdot (j_i-s)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=1}^n \sum_{l=1}^{(j_s)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}$$

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\binom{()}{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < l = l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, \dots\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{\binom{()}{j_s=1}}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{\binom{()}{j^{sa}=j_{sa}}} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_i + j_{sa} - l_s - s)!}{(l_i + j_{sa} - j_i - l_{sa})! \cdot (j_i - s)!}$$

$$\frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_s=1)}^{(n)}$$

$$\sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(n)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(n)}$$

$$\frac{(n - j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D > n \wedge l = i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{\binom{D}{s}} \sum_{j_{ik}=j_{sa}^{ik}}^{\binom{D-l_i-l+1}{j_{sa}^{sa}-j_{sa}}} \sum_{j_i=s}^{\binom{D-l_i-l+1}{n_s-n_{sa}-k_3-j_i+1}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{\binom{D}{s}} \sum_{j_{sa}=1}^{\binom{D}{s}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\binom{D}{j_{sa}^{sa}-j_{sa}}} \sum_{j_i=s}^{\binom{D}{n_s-n_{sa}-k_3-j_i+1}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\cdot)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{(D - l_i)}{(D + s - l_i)! (n - s)!}$$

$D \geq n < n \wedge l = l \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - j_{sa} \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa}^{ik} - j_{sa} = l_{sa}$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa} - 1$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z \geq 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^l \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\begin{aligned}
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - l_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i - (n - j_i))!} \cdot \\
& \sum_{k=i}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \\
& \sum_{j_{ik}=j_{sa}^{ik}}^{(\quad)} \sum_{(j^{sa}=j_{sa})}^{(\quad)} \sum_{j_i=s}^{(\quad)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \\
& \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(\quad)} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
\end{aligned}$$

$$n_i \geq n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 \wedge l = l_i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

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$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)} \dots$$

$$j_{ik}=j \quad (j_{sa}=j_i-s) \quad j_i=s$$

$$n_i=n+\mathbb{k} \quad (n=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)$$

$$n_{ik}+j_{sa}-\mathbb{k}_2 \quad (n_{sa}+j_{sa}-j_i-\mathbb{k}_3)$$

$$n_{sa}-j_{sa}+1 \quad (n_s=n-j_i+1)$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s} \sum_{n_i=n+k} \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2} \sum_{(n_s=n_{sa}+j_i-k_3)} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_{sa} - j_i - s)! \cdot (n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_s - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_i + j_i - s = j_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{ik} < j_{sa} - 1 \wedge j_{sa} = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^{sa}, j_{sa}^{ik}, \dots, k_2, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=n+k} \sum_{(n_{ik}=n+k_2+k_3-j_{ik}+1)}$$

$$\sum_{n_i=n+k} \sum_{(n_{ik}=n+k_2+k_3-j_{ik}+1)} \sum_{()}$$

$$\begin{aligned}
 & \sum_{n_{sa}=n+k_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_3)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - k_3 - 1)!} \cdot \\
 & \frac{(n_s - n - 1)! \cdot (n - j_i)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - l_s - j_{ik} + 1)!}{(l_{ik} - j_{ik} - l_s - 1)! \cdot (n - j_{sa} - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - l_i)!}{(n + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=i}^{()} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j^{sa}=j_{sa})}^{()} \sum_{j_i=s}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{()} \\
 & \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i-k_3)}^{()} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^3 \sum_{l=1}^3 \binom{()}{j_s=1, j_{ik}=1, j_i=1}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i-l+1} \sum_{j_{sa}=j_{ik}+1}^{()}{j_{sa}^{ik}} \sum_{j_i=j_{sa}+s-j_{sa}}^{()}{j_i}$$

$$\sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{(n_i-j_{ik}-k_1+1)}$$

$$\sum_{n_{sa}=n+k_3-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j_{sa}-j_i-k_3)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^{()} \sum_{l=1}^{()} (j_s=1)$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j^{sa}=j_{sa})}^{()} \sum_{j_i}^{()}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i-l-k_1+1)}^{()}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}^{()} \sum_{(n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (j_i + j_{sa} - 2 \cdot s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} - 1 \leq j_i \leq j^{sa} - j_{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_{sa} - j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k_1 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, j_{sa}^{ik}, \dots, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = k_1 + k_2 \wedge$$

$$k_2 \wedge k_3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=i}^{()} \sum_{l=1}^{()} (j_s=1)$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{sa})}^{l_i-l+1} \sum_{j_i=s}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \\
 & \sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - j_i - n - j_i - 1)!}{(n_s - j_i - n - j_i - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_i - l_{sa} - s)!}{(l_{sa} + l_i - j_i - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j^{sa}=j_{sa})}^{()} \sum_{j_i=s}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \\
 & \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{()} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$j_{ik}^{sa}, j_{ik}, j_{sa}^{sa} = \sum_{k=l}^n \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{sa}-i+1)} \sum_{(j^{sa}=j_{sa})} l_{i-i+1} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{(j_s)} \sum_{j_{ik}=j_s} \sum_{j_{sa}=j_{sa}} \sum_{j_i=s} \sum_{n_i=n}^n \sum_{n_{ik}=n_i - j_{ik} - k_1 + 1} (n_{ik} + j_{ik} - k_2 - k_3)! \cdot \sum_{n_s=n_{sa} + j^{sa} - j_i - k_3} (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)! \cdot (n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)! \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_i \leq l + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{l_s} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - l_s + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_s = j_s - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{j_s=1}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j^{sa}+s-}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2+...-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)}$$

$$\sum_{n_{ik}+j_{ik}-j^{sa}-k_2} \sum_{(j^{sa}-k_3)}$$

$$\sum_{n_{sa}=n+k_3-j^{sa}} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_{ik}-1)!}{(j_{ik}-1)! \cdot (n_i-j_{ik}+1)!}$$

$$\frac{(n_{sa}-n_{sa}-1)!}{(j_i-j_{ik}-1)! \cdot (n_i+j_{ik}-j^{sa}-k_2)!}$$

$$\frac{(n_{sa}-j^{sa}-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_i+j^{sa}-n_s-j_i-k_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(l_{ik}-j_{ik}-l_s+1)! \cdot (j_{ik}-j_{sa}^{ik})!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{j_s=1}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\cdot)} \sum_{j_i=s}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\cdot)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{(D - l_i)}{(D + s - l_i)! (n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - j_{sa}^{ik} = l_{sa}$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^n \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i^{l+1}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=s}^{l_i-i^{l+1}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\begin{aligned}
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa} - j_{sa}^{ik})!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik} - 1)! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=i}^l \sum_{(j_s=1)}^{()} \\
& \sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{()} \sum_{j_i=s}^{()} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \\
& \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{()} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l = \sum_{i=1}^l l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} & f_z S_{j_{sa}^{ik}, j_{sa}^s, j_{sa}^i} \\ & \sum_{k=1}^{\binom{()}{}} \sum_{l=1}^{\binom{()}{}} \\ & \sum_{j_{sa}^{ik}}^{l_{ik} - i + 1} \sum_{j_{sa}^s}^{(l_{sa} - i + 1)} \sum_{j_{sa}^i}^{s - j_{sa}} \\ & \sum_{n_{ik} = i + k}^n \sum_{n_{sa} = n + k_2 + k_3 - j_{ik} + 1}^{(n_i - j_{ik} - k_1 + 1)} \\ & \sum_{n_{sa} = n + k_3 - j_{sa} + 1}^{j_{sa} - k_2} \sum_{n_s = n - j_i + 1}^{(n_{sa} + j_{sa} - j_i - k_3)} \\ & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\ & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\ & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\ & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$\sum_{k=i}^{()} \sum_{l(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j^{sa}=j_{sa})}^{()} \sum_{j_i}^{()}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i-l-k_1+1)}^{()}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}^{()} \sum_{(n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (j_i + j_{sa} - 2 \cdot s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} - 1 \leq j_i \leq j^{sa} - j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_{sa} - j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > i \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{ik}, j_{sa}^{ik}, \dots, k_2, j_{sa}^{ik}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = i + k \wedge$$

$$k_2: j_{sa}^{ik} \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=i}^{()} \sum_{l(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i+1} \sum_{(j^{sa}=j_{sa})}^{(l_{sa}-i+1)} \sum_{j_i=s}^{l_i-i+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i-j_{ik}-l_{k_1}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n+l_{k_3}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_3})} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \frac{(n_s - j_i - n - l_s - 1)!}{(n_s - j_i - n - l_s - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - l_s - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} - j_{sa} - j_{sa}^{ik} - l_s + 1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{()} \sum_{j_i=s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{(n_s=n_{sa}+j^{sa}-j_i-l_{k_3})}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

GÜLDÜNYA

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$S_{j_s, j_{ik}, j_{sa}^{ik}} = \sum_{k=1}^{(j_s - j_{ik} + j_{sa}^{ik})} \sum_{j_{ik} - j_{sa} + j_{sa}^{ik} - j_{sa} + 1}^{(j_i + j_{sa} - l_{sa} + j_{sa} - l - s + 1)} \sum_{n_i = n + \mathbb{k} - j_s + 1}^{(n_i + j_s - j_{ik} - \mathbb{k}_1)} \sum_{n_{is} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{(n_{sa} + j^{sa} - j_i - \mathbb{k}_3)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(j_s)} \sum_{(j_s=j_{sa}+1)}^{(j_s)} \sum_{(j_{sa}=j_{sa}+1)}^{(l_{sa}+1)} \sum_{(l_{sa}+j_{sa}-l-s+2)}^{(l_{sa}+1)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik})}^{(j_{sa}+1)} \sum_{(j_{sa}=j_{sa}+1)}^{(l_{sa}+1)} \sum_{(l_{sa}+j_{sa}-l-s+2)}^{(l_{sa}+1)} \sum_{(n_i=n+l_k)}^{(n)} \sum_{(n_i=n+l_k-j_s+1)}^{(n_i+1)} \sum_{(n_{ik}=n+l_k+l_{k_3}-j_{ik}+1)}^{(n_i+1)} \sum_{(n_{ik}=n+l_k-j_s-l_{k_1})}^{(n_i+1)} \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_3})} \sum_{(n_s=n-j_i+1)}^{(n_s)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

GÜLDÜNYA

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa}}^{(\cdot)} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=s+1}^{l_{sa}+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{is}=n+l-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_1})}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{s_0} - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i = 0 + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{lk} - j_{sa} \leq j_{sa}^{lk} < j_i + j_{sa} - s \wedge j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{k_1} - j_{sa}^{ik} + 1 = l_{sa} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = l_{k_1} = 0 \wedge$$

$$j_{sa} < j_{sa}^{lk} - 1 \wedge j_{sa}^{ik} < j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \dots, l_{k_1}, j_{sa}^{lk}, \dots, j_{sa}, \dots, l_{k_3}, j_{sa}^l\} \wedge$$

$$s \geq 7 \wedge s = s + l_{k_1} \wedge$$

$$z = 2 \wedge k = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-l-s+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_i}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \\
 & \frac{(n_{sa}-n_s-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=l_{ik}+j_{sa}^{ik}-l-s+2}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - k_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n + j_i - 1)!} \cdot (n - j_i)! \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_i - l_{sa} - s)!}{(j^{sa} - l_s - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{()} \\
 & \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{()} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{()} \sum_{j_i = s + 1}^{l_{ik} + j_{sa}^{ik} - l - s + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1} \\
 & \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{()} \sum_{n_s = n_{sa} + j^{sa} - j_i - k_3} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{l_s+s-l} \sum_{j_i=s+1}^{n_i-j_s+1} \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{l_i!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa}^{s+1})} \sum_{j_i=l_s+s-l+1} \binom{()}{j_s - j_{sa}^{s+1}}$$

$$\sum_{n+l_k} \sum_{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1} \binom{()}{n_i - j_s}$$

$$\sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)} \sum_{n_s=n-j_i+1} \binom{()}{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+...)}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}+...-s)}^{(\cdot)} \sum_{l_s=s-l}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=...+j_s-j_{ik}-k_1)}^{(n_{ik}=...+j_s-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n_{ik}...-j^{sa}-k_2)}^{(\cdot)} \sum_{(n_{sa}+j^{sa}-j_i-k_3)}^{(\cdot)}$$

$$\frac{(n_i + j_i + ... - j^{sa} - 2 \cdot ... - k_1 - k_2 - k_3)!}{(n_{sa} - k_2 - k_3)! \cdot (n_{sa} + j^{sa} - j_i - k_3)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_i \leq l \wedge l_i \leq D + s - l \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + ... \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq ... + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - k + 1 = l_s - j_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$... \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_2: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 &\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{sa}+1)}^{(l_i-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\quad)} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 &\frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j^{sa}-n_{ik}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j^{sa}-1)! \cdot (n_s=n-j_i+l_{k_3}-j^{sa}-1)!} \\
 &\frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \\
 &\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \\
 &\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 &\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 &\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 &\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{sa}+1)}^{(l_i-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\quad)}
 \end{aligned}$$

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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_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{(l_s - l - 1)! \cdot (l - 2)!}{(l_s - j_s - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i - l_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} + j_{sa} - s > l_i \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_i\} \wedge$

$s \geq 7 \wedge s = \mathbb{k} + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{ik}+j_{sa}^{ik}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\begin{aligned}
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_{is} - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n + j_i - 1)!} \cdot (n - j_i)! \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_i - l_{sa} - s)!}{(j^{sa} - l_s - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}^{ik}-l-s+1)} \sum_{(j^{sa}=j_{sa}+1)}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{()} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}
 \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned} & \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \\ & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \end{aligned}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_s=1}^{(j_s - j_{sa}^{ik} + 1)} \sum_{j_{ik}=j^{sa} + j_{sa}^{ik} - j_s}^{(j^{sa} = j_{sa} - 1)} \sum_{j_i=j^{sa} + s - j_{sa}}^{(j^{sa} = j_{sa} - 1)} \sum_{j_i=n+\mathbb{k}}^{(n_i = n + \mathbb{k} - j_s + 1)} \sum_{n_{ik}=n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s - 1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_{sa} = n_{sa} + j^{sa} - j_i - \mathbb{k}_3)}$$

$$\frac{(n - j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

- $D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$
- $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$
- $D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{sa}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j_{sa}=j_{ik}+j_{sa}^{ik}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j_{sa}+s}^{l_i+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n+\mathbb{k}_1+1)}^{(i+1)} \sum_{n_{ik}=n+j_{ik}+1}^{(i_s-j_{ik}-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n-\mathbb{k}_3-j_{sa}+1)}^{(k+j_{ik}-j_{sa}^{ik_2})} \sum_{n_s=n-j_i+1}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

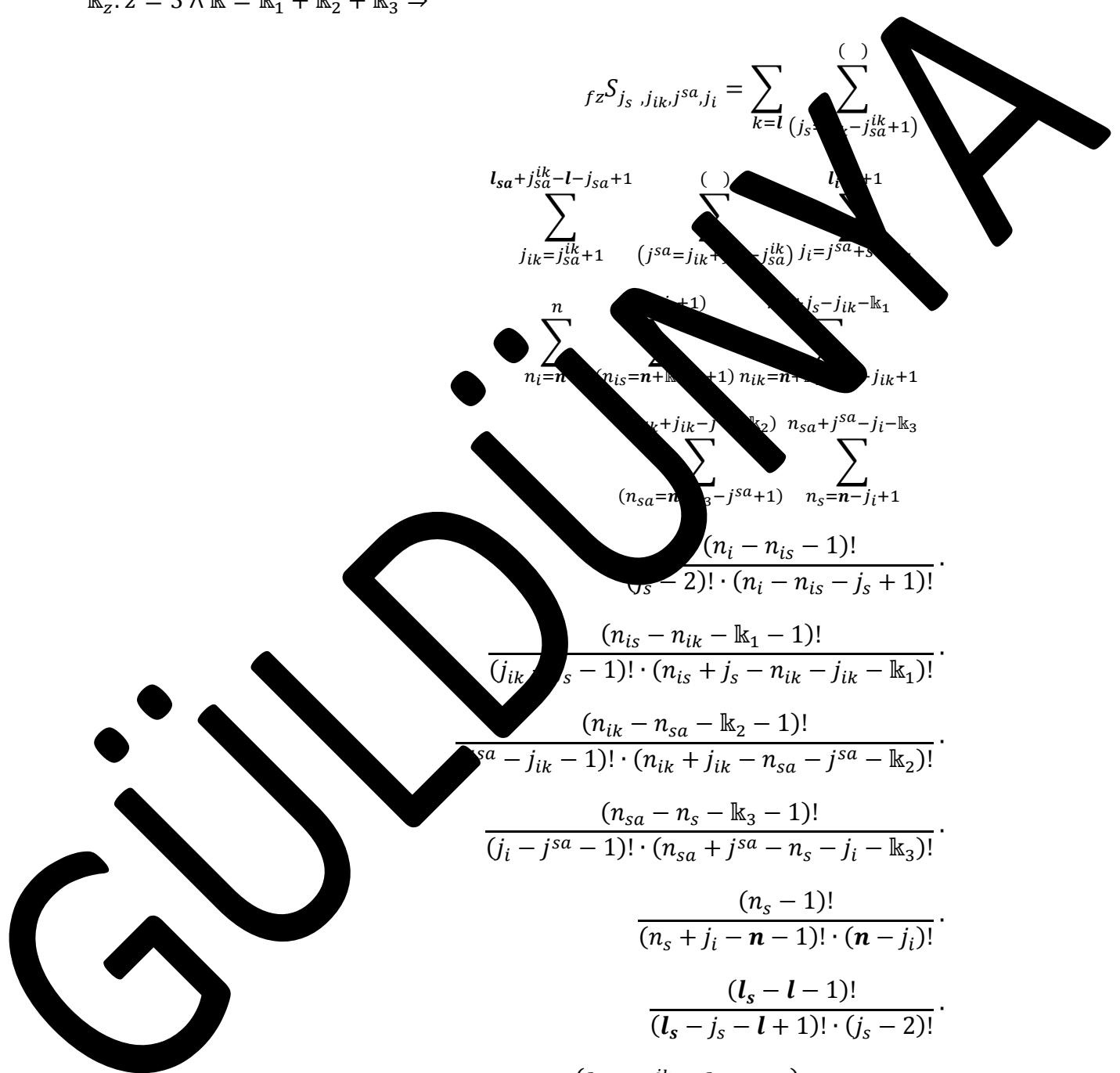
$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$



$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-1}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k_1}}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \sum_{(n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq l + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq l_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq l < n \wedge l = l_{k_1} + l_{k_2} + l_{k_3} \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s \leq l_{k_1} + l_{k_2} + l_{k_3} \wedge$$

$$l_{k_1} + l_{k_2} + l_{k_3} = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{lk}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+lk_2+lk_3-j_i}^{n_{is}+j_s-j_{ik}-lk_1} \\
 & \sum_{(n_{sa}=n+lk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-lk_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-lk_1-1)!}{(j_{ik}-j_s-1)!(n_{is}+j_s-n_{ik}-j_{ik}-lk_1)!} \cdot \\
 & \frac{(n_{ik}-n_s-lk_2-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-lk_2)!} \cdot \\
 & \frac{(n_{sa}-n_s-lk_3-1)!}{(j_i-j^{sa}-1)!(n_{ik}+j^{sa}-n_s-j_i-lk_3)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}
 \end{aligned}$$

$$\sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{lk}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{lk}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-lk_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot \frac{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}{(l_s - l - 1)! \cdot (j_s - l + 1)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_s \leq n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_i \wedge j_s - s > l_s \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\}$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l - 1)!}{(l_s - j_i - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - j_s - 1)! \cdot (j_i + j_s - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{l_s + j_{sa}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(j_s = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}^{(j_s = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s + 1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(j_s = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{(j_s = j_{ik} + j_{sa} - j_{sa}^{ik})} \cdot \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^l\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} & \sum_{i_k=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l-j_{sa}^{ik})} \sum_{i_s=j_{sa}^{ik}}^{(j_{sa}-j_{sa}^{ik})} \sum_{i_l=j^{sa}+s-j_{sa}}^{(l_s-l-j_{sa}^{ik})} \\ & \sum_{i_k=j_s+j_{sa}^{ik}-1}^{(n_i-j_s)} \sum_{i_s=j_{sa}^{ik}}^{(n_{is}+j_s-j_{ik}-k_1)} \\ & \sum_{i_k=j_s+j_{sa}^{ik}-1}^{(n+k)} \sum_{i_s=j_{sa}^{ik}}^{(n_{is}=n+k-j_s+1)} \sum_{i_l=j^{sa}+s-j_{sa}}^{(n_{ik}=n+k_2+k_3-j_{ik}+1)} \\ & \sum_{i_k=j_s+j_{sa}^{ik}-1}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{i_s=j_{sa}^{ik}}^{(n_{sa}+j^{sa}-j_i-k_3)} \\ & \sum_{i_k=j_s+j_{sa}^{ik}-1}^{(n_{sa}=n+k_3-j^{sa}+1)} \sum_{i_s=j_{sa}^{ik}}^{(n_s=n-j_i+1)} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \end{aligned}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j^{sa}=j_{ik}+j_{sa}-1)} \sum_{(j_i=j^{sa}-j_{sa})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}+j_s-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}-k_2)}^{(n_{sa}=n_{ik}-j^{sa}-k_2)} \sum_{(n_{sa}+j^{sa}-j_i-k_3)}$$

$$\frac{(n_i + j_i - j^{sa} - 2 \cdot k_1 - k_2 - k_3)!}{(n_i - k_1 - k_2 - k_3)! \cdot (n_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l = l \wedge l_i = D + s - 1 \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - k_1 + 1 = j_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_i < j_i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned}
 f_{z^S} S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \\
 &\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 &\frac{(n_{ik}+j_{ik}-j^{sa}+j_{sa}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j^{sa}-1)! \cdot (n_s=n-j_i+l_{k_3})!} \cdot \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}+j_s-j_{ik}-l_{k_1})!} \\
 &\frac{(n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-j_{ik}-l_{k_1})!} \cdot \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \\
 &\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \\
 &\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}
 \end{aligned}$$

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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_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{(l_s - l - 1)! \cdot (l - 2)!}{(l_s - j_s - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i - l_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$
 $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} + j_{sa} - s > l_i \wedge$
 $D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$
 $j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$
 $s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, \dots, j_i\} \wedge$
 $s \geq 7 \wedge s = \dots + \mathbb{k} \wedge$
 $\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-k_2) \\ (n_{sa}=n+k_3-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-k_3 \\ n_s=n-j_i+1}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!}$$

$$\frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n + j_i - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_i - l_{sa} - s)!}{(j^{sa} - l_s - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

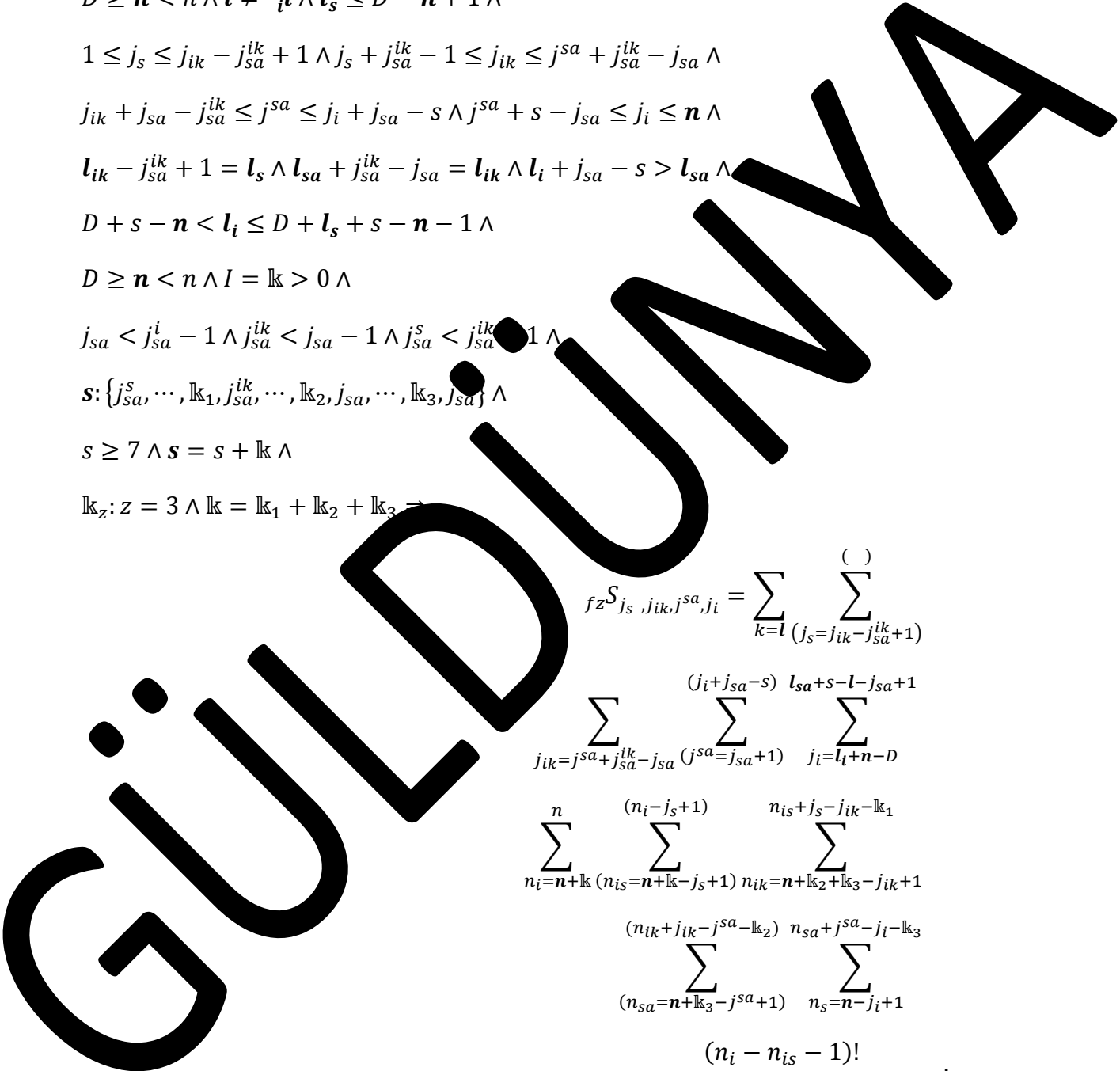
$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$



$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l - 1)!}{(j^{sa} + l_i - j_i - l_{sa} - 1)! \cdot (j_i + j_{sa} - l - 1)!} \cdot \\
 & \frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \sum_{l=0}^{j_s - 1} \sum_{j_s = j_{ik} - j_{sa} + 1}^{j_s} \sum_{j_i = l_{sa} + s - l - j_{sa} + 2}^{l_i - l + 1} \sum_{j_{sa} = j_{sa} + 1}^{l_i - l + 1} \sum_{n_{is} = n + \mathbb{k}_2 - j_s + 1}^{n_i - j_s + 1} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{sa}+1)}^{()} \sum_{j_{ik}=j^{sa}+j_{sa}^{lk}}$$

$$\sum_{n_i=n+l_k}^{n} \sum_{n_i=n+l_k-j_{sa}^{lk}}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{lk} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{lk} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{lk} = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^l - 1 \wedge j_{sa}^{lk} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{lk} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{lk}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^l\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{l_{ik}+s-l-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i+1)}^{+j_s-j_i-\mathbb{k}_1}$$

$$\frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{is}-\mathbb{k}_1-1)!}{(j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=l_{ik}+s-l-j_{sa}^{ik}+2}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_i}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \frac{(n_{sa}-n_s-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_s+j^{sa}-n_s-j_i-k_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}
 \end{aligned}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_s \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq j_{ik} \wedge l_i + j_s - s > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - j_{sa}^i + 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \dots \wedge$$

$$\mathbb{k}_1 : z = 3 \wedge \dots = \mathbb{k}_1 + \dots + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=l_i+n-D}^{l_s+s-l} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + \dots - n - 1)!}{(n_s + \dots - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - l - 1)!}{(n - l - 1)! \cdot (j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + \dots - l_{sa})}{(j^{sa} + l_i + \dots - l_{sa}) \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D - l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=j_{sa}+1)}^{l_i-l+1} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}} \binom{()}{j_s - j_{sa}^{ik} + 1} \sum_{j_i=l_i+n-D} \binom{()}{l_s+s-l}$$

$$\sum_{i=n+\mathbb{k}} \binom{(n_i - j_i - 1)}{(n_{is} = n + \mathbb{k} - j_s + 1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \binom{()}{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n - j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

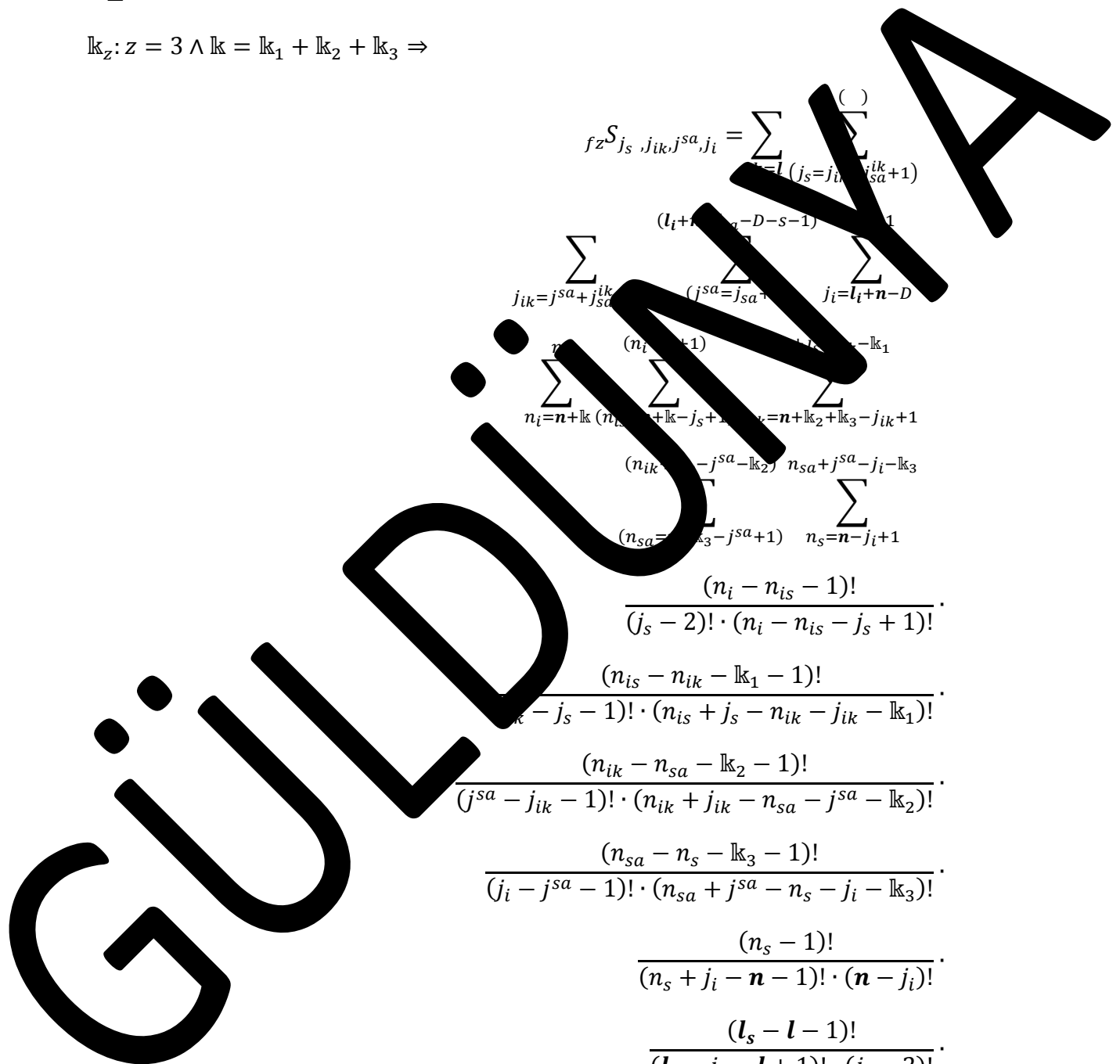
$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{l=1}^{()} \sum_{(j_s=j_{ik}, j_{sa}^{ik}+1)} \sum_{(l_i+l_{sa}-D-s-1)} \sum_{(j_i=l_i+n-D)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik})} \sum_{(j_{sa}=j_{sa}+j_{sa}^{ik})} \sum_{(j_i=l_i+n-D)} \sum_{(n_i=n+\mathbb{k})} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)} \sum_{(n_{sa}=n+\mathbb{k}_3-j_{sa}+1)} \sum_{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$



$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(l_i-l+1)} j_i=j_{sa}+s-j_{sa}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\frac{(n_{ik}+j_{ik}-j_{sa}+j_{sa}^{lk}-j_{sa}+j_{sa}^{lk}-j_{sa}+j_{sa}^{lk}-j_{sa})!}{(n_{sa}=n+l_{k_3}-j_{sa}+1)! \cdot (n_s=n-j_i+l_{k_3}-j_{sa}+1)!}$$

$$\frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_s-j_s-2)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}+1)!}$$

$$\frac{(n_{ik}-n_{sa}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!}$$

$$\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j_{sa}-l_{k_2})!}$$

$$\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-l_{k_3})!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(l_{sa}-l+1)} j_i=j_{sa}+s-j_{sa}$$

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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_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - 1)! \cdot (l - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i - l_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} + j_{sa} - s > l_s \wedge$

$D + s - n < l_i \leq D + l_s + j_i - n - 1$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$

$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$

$s \geq 7 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\begin{aligned}
 & \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_{is} - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(j_i + j_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{ik} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{l_i-l+1} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - l_s - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^k+1)}^{()} \\
 & \sum_{j_{ik}=j^{sa}+j_i-j_{sa}}^{(j_{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j_{sa}=l-j_{sa}^k+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned} S_{j_s, j_{ik}, j_{sa}^i} &= \sum_{k=1}^{()} (j_s = j_{ik} - j_{sa}^{ik} + 1) \\ &\sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{n} \sum_{j_{sa}=j_{sa}^{ik}-j_{sa}}^{n+j_{sa}^{ik}-j_{sa}-1} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\ &\sum_{j_s=1}^{n} \sum_{j_{sa}=j_{sa}^{ik}-j_{sa}}^{n+j_{sa}^{ik}-j_{sa}-1} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\ &\sum_{j_{sa}=n+\mathbb{k}_3-j_{sa}^{ik}+1}^{n} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ &\sum_{n_{sa}=n+\mathbb{k}_3-j_{sa}^{ik}+1}^{n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ &\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\ &\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(j_s)} \sum_{(j_s=j_{sa}+1)}^{(j_s)} \sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+l-1)} \sum_{(j_i=j^{sa}+s-j_{sa})}^{(j_s)} \sum_{(n_{is}=l_i+n+j_{sa}-j_{sa})}^{(j_s)} \sum_{(n_{ik}=n+l_1-j_{sa}-j_{sa})}^{(j_s)} \sum_{(n_{ik}=n+l_2+l_3-j_{ik}+1)}^{(j_s)} \sum_{(n_{sa}=n+l_3-j_{sa}-l_3)}^{(j_s)} \sum_{(n_{sa}=n+l_3-j_{sa}+1)}^{(j_s)} \sum_{(n_s=n-j_i+1)}^{(j_s)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - l_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j_{sa}^a=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j_{sa}+s-j_{sa}^{ik}}^{(l_s+j_{sa}-l)}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-lk_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_1)}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{lk_1} - lk_2 - lk_3)!}{(n_i - n - lk_1 - lk_2 - lk_3)! \cdot (j_i + j_{sa} - s - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s = D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq a + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{lk} - j_{sa} \leq j_{sa}^{lk} \leq j_i + j_{sa} - s \wedge a - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_i \leq D - l_s + s - 1 \wedge$$

$$\geq n < l_i \wedge l = lk > 0$$

$$j_{sa} < j_{sa}^{lk} - 1 \wedge j_{sa}^{lk} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$$

$$\geq 7 \wedge s + lk \wedge$$

$$lk_z: z = 3 \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \binom{(\quad)}{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_i}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i-k_1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{sa}-n_{sa}-j_{sa}-k_2)!} \cdot \frac{(n_{sa}-k_3-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-k_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \binom{(\quad)}{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - k_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n + j_i - 1)!} \cdot (n - j_i)! \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_i - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{()} \\
 & \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{()} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1} \\
 & \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{()} \sum_{n_s = n_{sa} + j^{sa} - j_i - k_3} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}
 \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

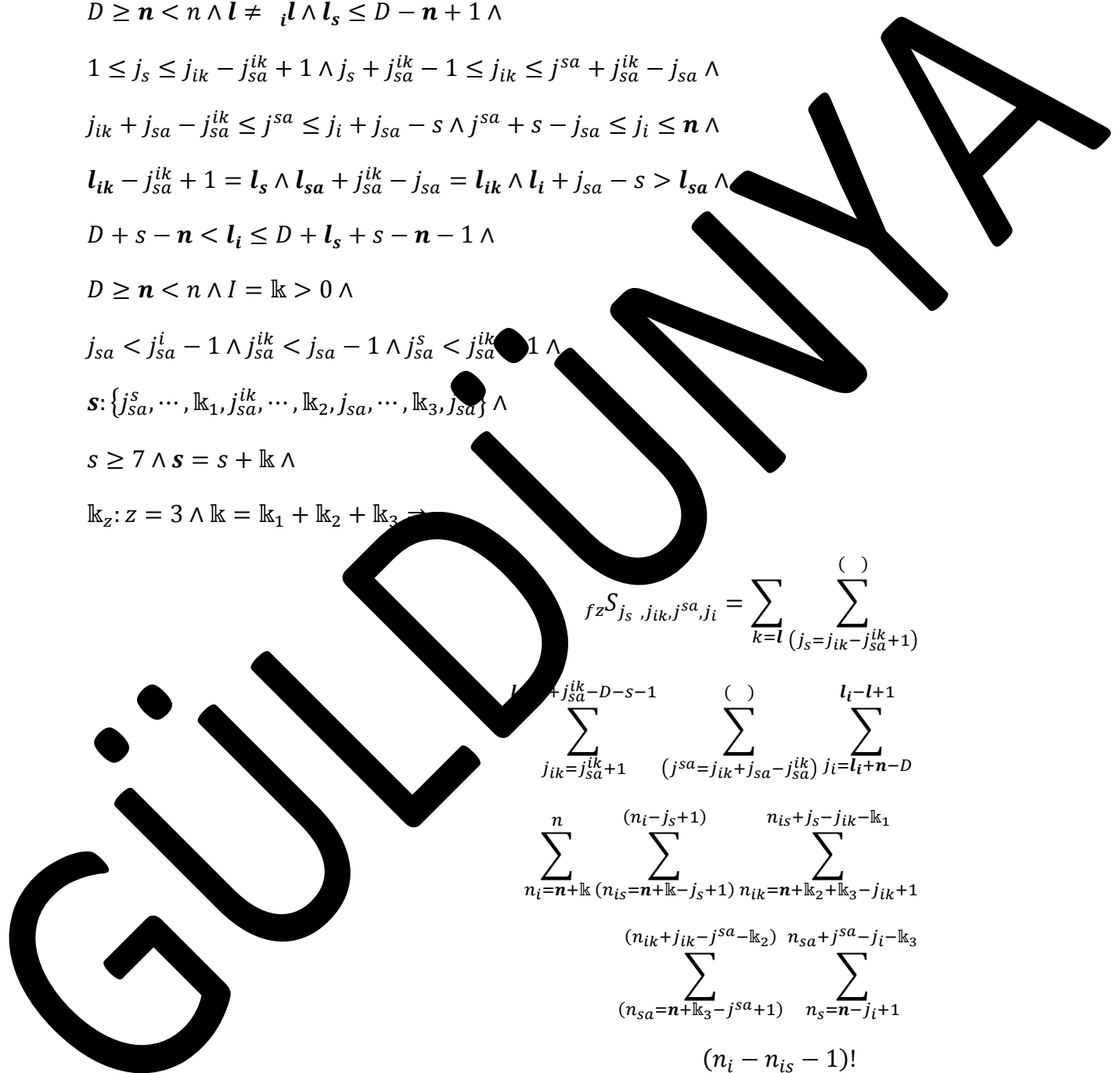
$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$



$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l - 1)!}{(j^{sa} + l_i - j_i - l_{sa} - 1)! \cdot (j_i + j_{sa} - l - 1)!} \cdot \\
 & \frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \sum_{l=0}^{j_s - j_{ik} - j_{sa} + 1} \sum_{j_s = j_{ik} - j_{sa} + 1}^{j_s} \\
 & \sum_{j_{ik} = n + j_{sa} - l + 1}^{n + l} \sum_{j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n - j_s + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n + \mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(j_s)} \sum_{(j_s=j_{sa}+j_{ik}+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{lk}-D-(j_{sa}=j_{ik}+j_{sa}-j_i)}^{l_{ik}-l+1} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_i=n+l_k-j_{sa}^{lk}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}$$

$$\sum_{n_{ik}+j_{ik}-l_{k2}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k3}}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - l_{k1} - l_{k2} - l_{k3})!}{(D + j_i - n - l_i - l_{k1} - l_{k2} - l_{k3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k1}, j_{sa}^{ik}, \dots, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i)}^{(n_{is}-n_{ik}+\mathbb{k}_1)}$$

$$\frac{(n_{is}-n_{ik}+\mathbb{k}_1-1)!}{(j_s-2)! \cdot (n_{is}-n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_s-2)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

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$$\begin{aligned}
 & \sum_{j_{ik} = l_i + n + j_{sa}^{lk} - D - s}^{l_s + j_{sa}^{lk} - l} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{lk})} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 + k_3 - j_i}^{n_{is} + j_s - j_{ik} - k_1} \\
 & \sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s = j_i + 1}^{n_{sa} + j^{sa} - j_i - 1} \\
 & \frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 1)!} \cdot \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_i - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - k_3 - 1)!}{(j_i - n_{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$\sum_{k=l} \sum_{(j_s = j_{ik} - j_{sa}^{lk} + 1)}$$

$$\begin{aligned}
 & \sum_{j_{ik} = l_i + n + j_{sa}^{lk} - D - s}^{l_s + j_{sa}^{lk} - l} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{lk})} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}
 \end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq j_{ik} \wedge l_i + j_s - s > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - j_{sa}^i + 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \dots \wedge$$

$$\mathbb{k}_1 : z = 3 \wedge \dots = \mathbb{k}_1 + \dots + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s + n - n - 1)!}{(n_s + n - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(n - l - 1)!}{(n - l - 1)! \cdot (j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + n - l_{sa} - 1)!}{(j^{sa} + l_i - l_{sa} - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(l_{sa} - l - j_{sa} + 2)} \sum_{(j_s = l_i + n - D - s + 1)} \\
& \sum_{j_{ik} = j_s + j_{sa}^{lk} - 1}^{()} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{lk})} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 1} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
\end{aligned}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{i=l_i}^{(l_{sa}-l-j_{sa}+s)} \sum_{j_i=j_i-D-s+1}^{(n-l_i)}$$

$$\sum_{i_{ik}=j_s+j_{sa}^{ik}-1}^{(n-l_i)} \sum_{i_{ik}=j_{sa}-j_{sa}}^{(n-l_i)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(n-l_i)}$$

$$\sum_{i=n+\mathbb{k}}^{(n-l_i-1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n-l_i-1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n-l_i-1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n-l_i-1)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(n-l_i-1)}$$

$$\frac{(n - j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n - l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

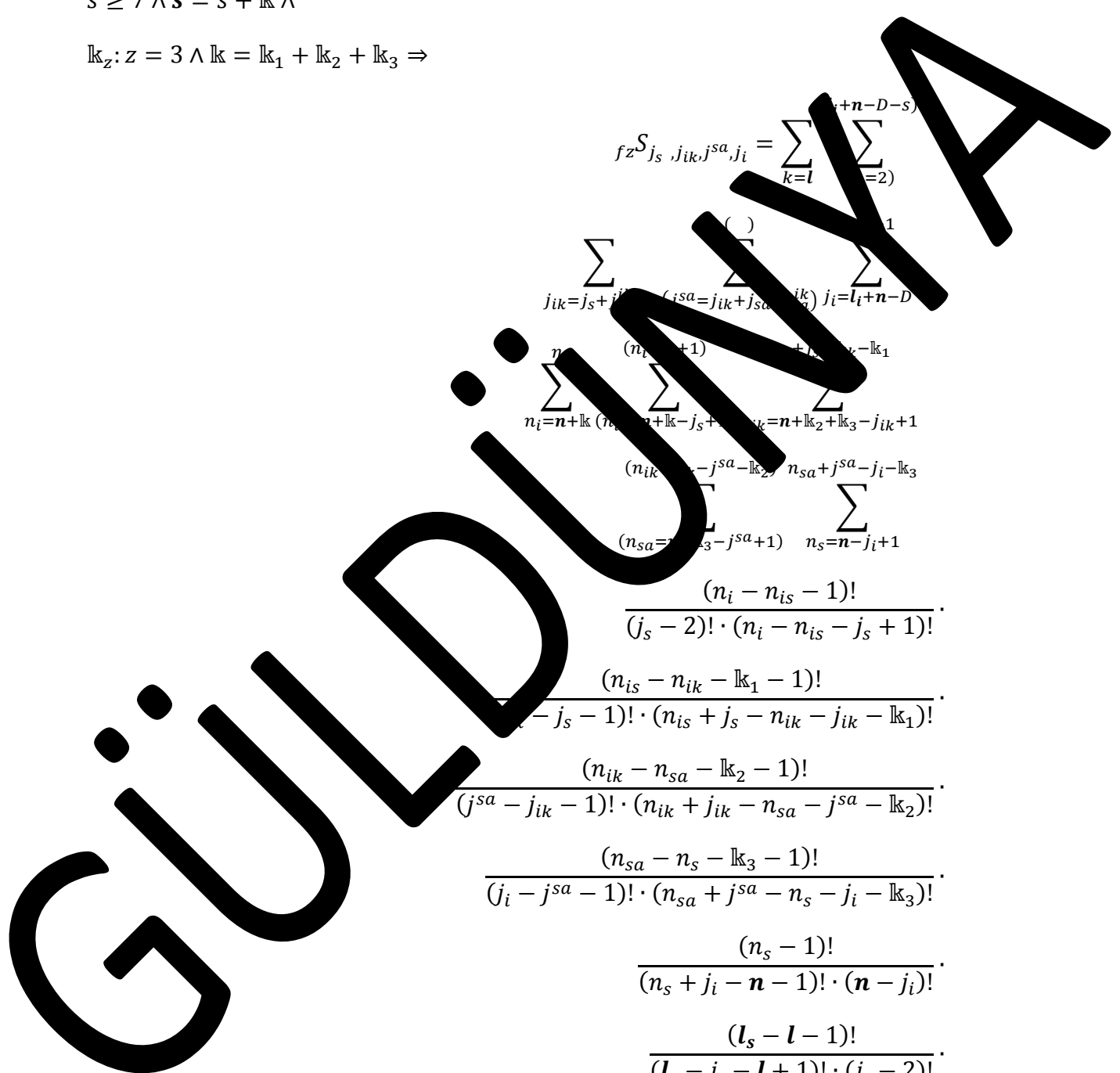
$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{i+n-D-s} \sum_{i=2}^{i+n-D-s} \sum_{j_{ik}=j_s+j_{sa}^{ik}}^{(j_{sa}=j_{ik}+j_{sa}^{ik})} \sum_{j_i=l_i+n-D}^{(j_i=l_i+n-D)} \sum_{n_i=n+\mathbb{k}}^{(n_i=n+\mathbb{k}+1)} \sum_{n_{sa}=n+\mathbb{k}-j_s}^{(n_{sa}=n+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)} \sum_{n_{sa}=n_{ik}-j_{sa}-\mathbb{k}_2}^{(n_{sa}=n_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$



$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \frac{(n_{ik}+j_{ik}-j_{sa}^{ik}+j_{sa}^{ik}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j_{sa}^{ik}-1)! \cdot (n_s=n-j_i+l_{k_3})!} \cdot \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}+j_s-j_{ik}-l_{k_1})!} \\
 & \frac{(n_{ik}-n_{is}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-j_{ik}-l_{k_1})!} \cdot \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}^{ik}-l_{k_2})!} \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-l_{k_3})!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}^{l_i-l+1}
 \end{aligned}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{(l_s - l - 1)! \cdot (l - 2)!}{(l_s - j_s - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i - l_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} + j_{sa} - s > l_s \wedge$

$D + s - n < l_i \leq D + l_s - n - 1$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$

$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$

$s \geq 7 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j^{sa}, j_i}} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\quad)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\begin{aligned}
 & \sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - l_2)!} \cdot \\
 & \frac{(n_{sa} - n_{sa} - l_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot (n - j_i)! \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{ik} - l_{sa} - s)!}{(j^{sa} - l_s - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+l_3}^n \sum_{(n_{is}=n+l_3-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_2+l_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_1} \\
 & \sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - \dots)! \cdot (j_i + \dots - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik} = \dots + j_{sa}^{lk} - 1}^{(j_{ik} + j_{sa}^{lk} - 1)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{lk})}^{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{lk})} \sum_{j_i = j^{sa} + s - j_{sa}}^{(j_i = j^{sa} + s - j_{sa})} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s + 1)} \\
 & \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(j_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{(j_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3)} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$$D + l_s + s - n - l_i + 1 \leq l \leq l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz \cdot \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_{ik}-j_{sa}^{ik}+1} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1} \sum_{i=n+k}^{(n_i-j_s+1)} \sum_{n_{is}=n+k-j_s+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_{sa}=n+k_3-j^{sa}+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{j_s} (j_s = j_{ik} - j_{sa}) \cdot \sum_{j_i = j_{sa} - k - j_{sa}}^{(j_i = j_{sa} - k - j_{sa})} (j_i = j_{sa} - k - j_{sa}) \cdot \sum_{n_i = n + k}^{(n_i = n + k)} (n_i = n + k) \cdot \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}^{(n_{ik} = n_{is} + j_s - j_{ik} - k_1)} (n_{ik} = n_{is} + j_s - j_{ik} - k_1) \cdot \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)} (n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2) \cdot \sum_{n_s = n_{sa} + j^{sa} - j_i - k_3}^{(n_s = n_{sa} + j^{sa} - j_i - k_3)} (n_s = n_{sa} + j^{sa} - j_i - k_3) \cdot \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D > n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$

$j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{l=1}^{()} \sum_{(j_s=j_{ik}, j_{sa}^{ik}+1)} \sum_{(l_{ik}+l-j_{sa}^{ik}+1)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}, j_{sa}=j_{sa}+j_{sa}^{ik}, j_i=l_i+n-D)} \sum_{(n_i-1)} \sum_{(n_i=n+\mathbb{k} (n_{is}+ \mathbb{k}-j_s+1), n_s=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)} \sum_{(n_{ik}+j_{sa}-j_{sa}^{ik}-\mathbb{k}_2)} \sum_{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \sum_{(n_{sa}-\mathbb{k}_3-j_{sa}+1)} \sum_{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_i+n-l-j_{sa}^{ik}+1}^{(\cdot)}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{is}=n+l-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{ik}-l_{k_1}}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{(\cdot)} \sum_{(n_{sa}+j_{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \geq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_s \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} - j_{sa} \leq j_i \leq j_{sa} - s + j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n \leq l_i \leq D + s - n - 1 \wedge$$

$$D \geq n < n \wedge l \neq i \wedge l_s \geq D - n + 1 \wedge$$

$$j_{sa} < j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\{j_s, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_{k_1} \wedge$$

$$l_{k_2}: z = 3 \wedge l_{k_2} = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

$$\begin{aligned}
 f_{zS} S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 &\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=j_{sa}+1)}^{l_i-l+1} \sum_{j_i=l_i+n} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 &\sum_{(n_{sa}=n+k_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\
 &\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}+j_s+1)!} \\
 &\frac{(n_{ik}-n_{is}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 &\frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 &\frac{(n_{sa}-n_s-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 &\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}
 \end{aligned}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - 1)! \cdot (l - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i - l_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

$D + l_s + s - n - l_i + 1 \leq l \leq i - 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_s \leq j^{sa} + j_{sa}^{ik} - 1$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa}^{ik} - 1 \leq j_i \leq j_{sa}^{ik} + j_{sa} - 1$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - j_{sa}^{ik} = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1$

$D \geq n < n \wedge l = i > 0$

$j_s < j_{sa}^{ik} - j_{sa}^{ik} < j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^s, \dots, \mathbb{k}_3, j_{sa}^s\} \wedge$

$s \geq 7, l_s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_{sa} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

$$\sum_{k=l} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l-j_s+1)}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{\substack{() \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - j_{sa}^{ik} = l_s$

$D + s - n < l_i \leq D + l_s + s - n - l_i$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}\}$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 =$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - l_s - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{(l_{sa} - l - j_{sa} + 2)} \sum_{(j_s = l_i + n - D - s + 1)} \sum_{j_{ik} + j_{sa}^{lk} - 1}^{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{lk})} \sum_{j_i = j^{sa} + s - j_{sa}}^{(n_i - j_s + 1)} \sum_{n_i = n + \mathbb{k}}^{(n_{is} = n + \mathbb{k} - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3)} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\sum_{j_s=2}^{(l_{ik} - j_{sa}^{ik} + 2)} \sum_{j_i=l_i+n-D}^{(j_{sa} - j_{sa}^{ik} + 1)} \sum_{j_i=n+k}^{(n_i - j_s + 1)} \sum_{n_{is}=n+k-j_s+1}^{(n_{is} + j_s - j_{ik} - k_1)} \sum_{n_s=n-j_i+1}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s=n-j_i+1}^{(n_{sa} + j^{sa} - j_i - k_3)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_s=l_i+n-D-s}^{l_{ik}-l-1} \sum_{j_{sa}=j_s}^{j_s-1} \sum_{j_{ik}=j_s}^{j_s-1} \sum_{j_{ik}-1}^{j_s-1} (j^{sa} + j_{sa} - j_{sa}^{ik})! \cdot (j_s - j_{sa})! \cdot \sum_{n+l_k}^n \sum_{n_{is}=n+l_k}^{j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}^{j_s-1} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2}}^{j_s-1} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k3}}^{j_s-1} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - l_{k1} - l_{k2} - l_{k3})!}{(n_i - n - l_{k2} - l_{k3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

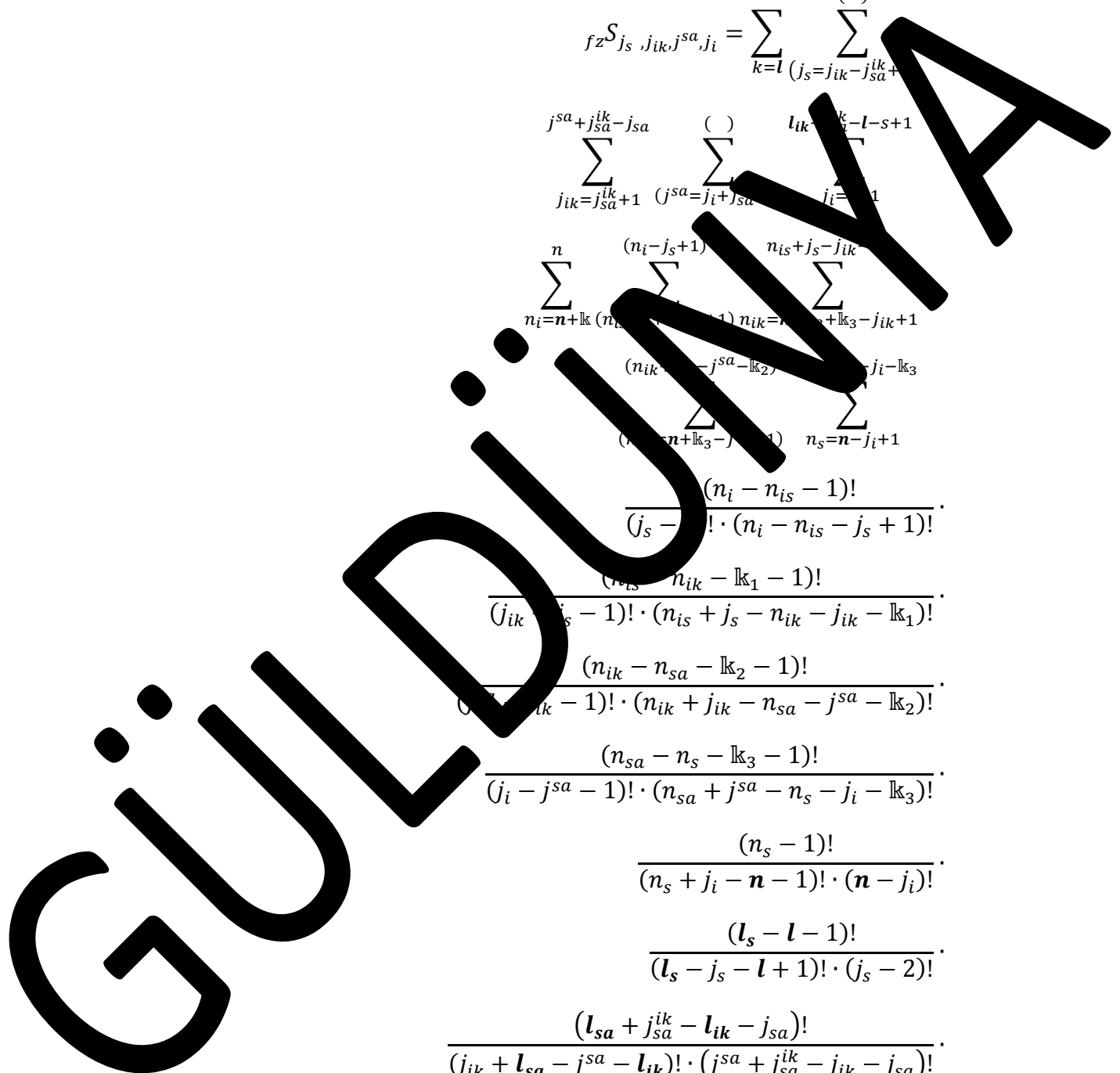
$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+ \dots)}^{()} \dots$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_i+j_{sa}^{ik})}^{()} \sum_{j_i=1}^{l_{ik}-\mathbb{k}_1-l-s+1} \dots$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \dots$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$



$$\begin{aligned}
 & \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{ik}+j_{sa}^{ik}-l-s}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j^{sa}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j^{sa}-1)! \cdot (n_s=n-j_i+l_{k_3}-1)!} \\
 & \frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}+j_s+1)!} \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-l_{k_3}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-l-s+1}
 \end{aligned}$$

GÜLDÜZÜMÜ

$$\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_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{(l_s - l - j_i - j_{sa} - j^{sa} - 1)! \cdot (l_s - j_s - 1)! \cdot (l_s - 2)!}{(l_s - j_s - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - j_{ik} - j_{sa} - l_i)! \cdot (n - j_i - j_{sa} - j^{sa} - l_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i \geq l_{ik} \wedge l_{sa} + j_{sa} - s = l_s \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_i\} \wedge$

$s \geq 7 \wedge s = \mathbb{k} + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\)} \sum_{j_i=s+1}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-k_2)!} \cdot \frac{(n_{sa}-n_{sa}-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \cdot \frac{(n_s-1)!}{(n-j_i-1)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-l_{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l - 1)!}{(l_s - j_i - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l)!}{(D + j_i - n - l)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=s+1}^{l_s+s-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

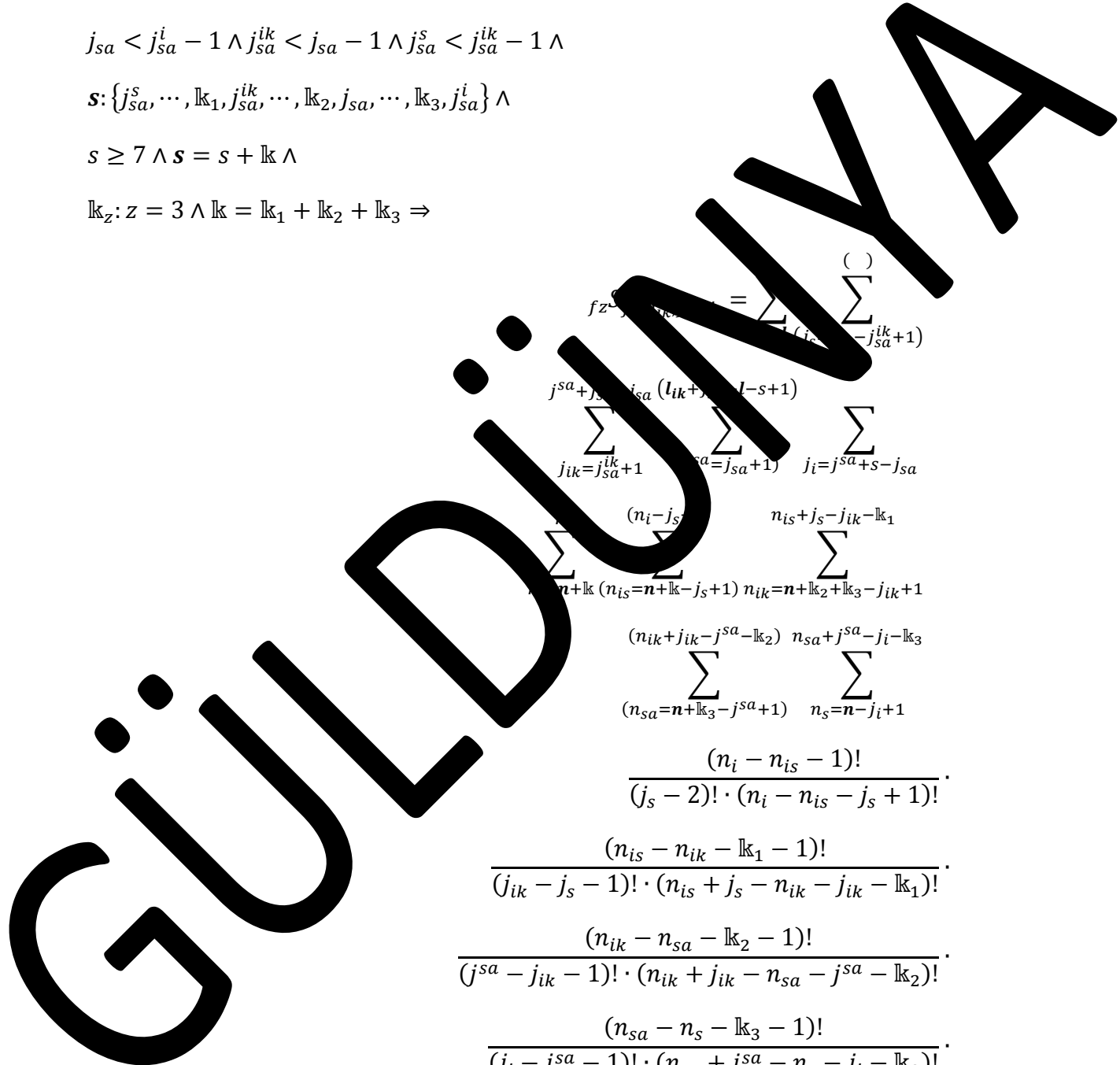
$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^{(s)} = \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_i=j_{sa}^{ik}+1}^{(n_i-j_s)} \sum_{j_{sa}=j_{sa}^{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_{sa}=n+k_3-j_{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$



$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{()} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = l_{ik} + j_{ik}^{k-l-s+2})}^{(l_{sa} - l + 1)} \sum_{(n_i = n + k)}^n \sum_{(n_{is} = n_{ik} - j_s)}^{(n_i - j_s + 1)} \sum_{(n_{is} + j_s - j_{ik} - k_1)}^{(n_{is} + j_s - j_{ik} - k_1)} \sum_{(n_{ik} + j_{ik} - n_{sa} - k_2)}^{(n_{ik} + j_{ik} - n_{sa} - k_2)} \sum_{(n_{sa} = n - j_i + 1)}^{(n_{sa} = n - j_i + 1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

GÜLDENWA

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^a+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}^{ik}-l-s+1)} \sum_{(j_{sa}=j_{sa}+1)} \sum_{j_i=j_{sa}+s-}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_i-j_{ik}-l_{k_1}}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{()} \sum_{(n_{sa}+j_{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq n + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^a + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_s \leq j_i + j_{sa} - s \wedge j_{sa}^a - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = l_{k_1} + l_{k_2} + l_{k_3} \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s \leq n + l_{k_1} \wedge$$

$$l_{k_3} = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_i-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-l_{k_3}-1)!}{(j_i-n_{sa}-1)! \cdot (n_i+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=l}^{\binom{()}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-k_2) \\ (n_{sa}=n+k_3-j^{sa}+1)}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2 - 1)!}$$

$$\frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i - k_3 - 1)!}$$

$$\frac{(n_s - 1)!}{(n + j_i - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned} & \sum_{k=l}^{(j_s - j_{ik} - j_{sa}^{ik} + 1)} \sum_{j_i=j^{sa} + s - j_{sa}}^{(l_{sa} - l + 1)} \\ & \sum_{j_{ik}=j_{sa}^{ik} + 1}^{(l_{sa} - l + 1)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i=j^{sa} + s - j_{sa}} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\ & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \end{aligned}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_{ik}=j_{sa}^{lk}+1}^{l_{ik}-1} \sum_{j_i=j^{sa}+s-j_{sa}}^{j_{sa}^{lk}+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(n_{sa})} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(n_s)}$$

$$\frac{(n_{sa} + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_{sa} + j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$j_i \geq n - l_i \wedge l_i \neq j_i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

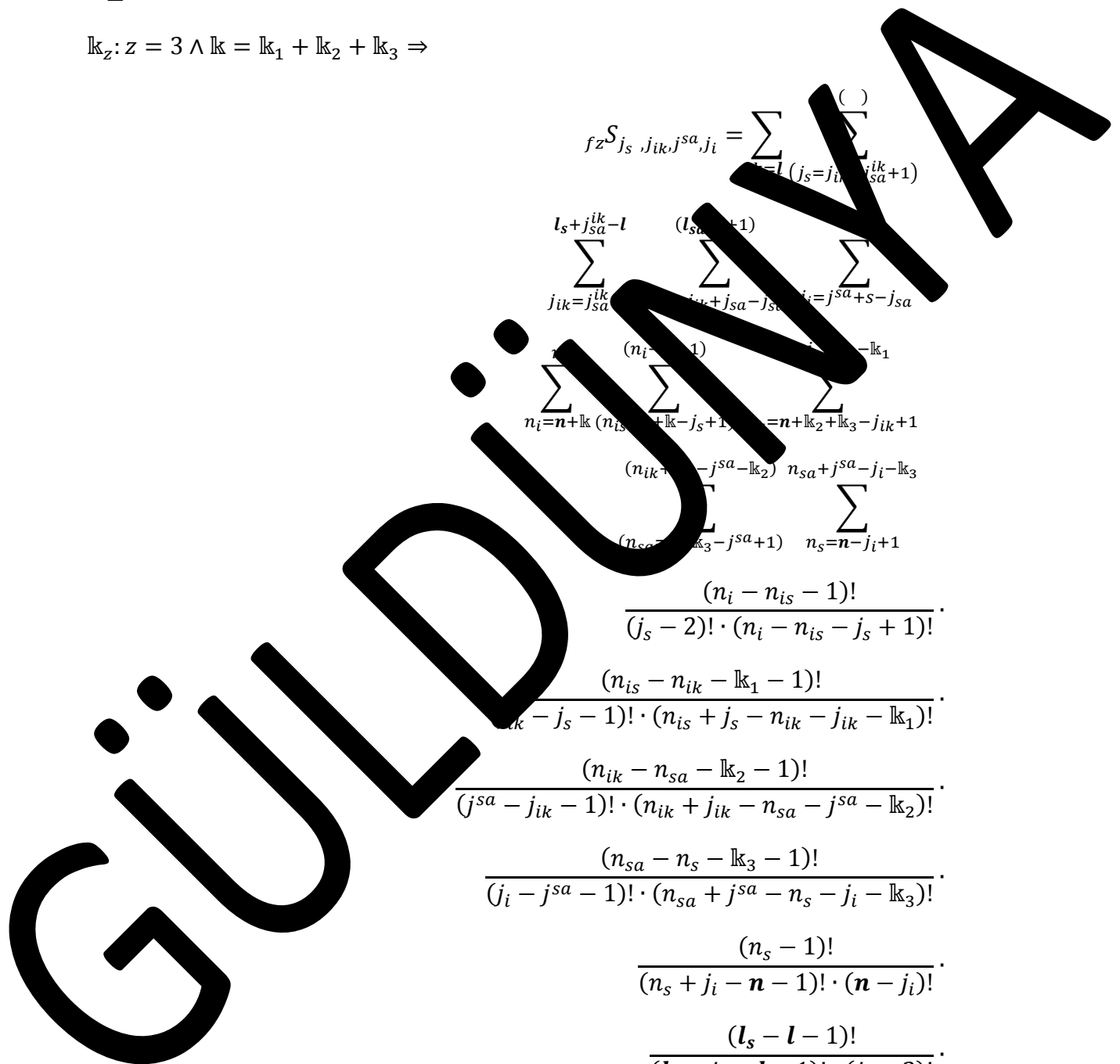
$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{l=1}^{()} \sum_{j_s=j_{ik}+1}^{()} \sum_{j_{sa}^{ik}+1}^{()} \sum_{j_{ik}=j_{sa}^{ik}}^{l_s+j_{sa}^{ik}-l} \sum_{j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{sa}+1)} \sum_{j_i=j_{sa}+s-j_{sa}}^{(n_i-1)} \sum_{n_i=n+\mathbb{k}}^{(n_{is}+1)} \sum_{n_{is}+1}^{n+\mathbb{k}-j_s+1} \sum_{n_s=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_{ik}+1)} \sum_{n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_{sa}+1)} \sum_{n_s=n-j_i+1}^{(n_{sa}-\mathbb{k}_3-j_{sa}+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$



$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_{ik}=j_{sa}^{ik}+s-j_{sa}}^{(\cdot)} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s}^{(\cdot)} \sum_{(n_{ik}+j_{sa}^{ik}-l_k) \leq n_{ik} \leq n_{ik}+j_{sa}^{ik}-l_k}^{(\cdot)} \sum_{(n_{ik}+j_{sa}^{ik}-l_k) \leq n_{ik} \leq n_{ik}+j_{sa}^{ik}-l_k}^{(\cdot)} \frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s - l_k - l_{k_2} - l_{k_3})!}{(n_i - n - l_k - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_i \leq D + s - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq j_i + j_{sa} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa}^{ik} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = l_k > 1 \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}\} \wedge$$

$$s \geq 1 \wedge s = s + l_k \wedge$$

$$l_{k_z}: z = 3 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{(\cdot)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(l_{sa}-l+1)}^{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)!(n_i-n_{is}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{is}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_{ik}-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)!(n_{ik}+j_{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{lk}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{lk}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{lk}+2)} \sum_{(j_s=2)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l + 1)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_s \leq n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s = l_s \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i, \dots, k_3, j_{sa}^l\}$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l - 1)!}{(l_s - j_i - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l)!}{(D + j_i - n - l)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik} + j_s + j_{sa}^{ik} - 1}^{()} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned} S_{j_s, j_{ik}, j_{sa}}^{(j_i)} &= \sum_{k=1}^{(j_i)} \binom{j_i}{j_s = j_{ik} - j_{sa}^{ik} + 1} \\ & \sum_{j_{sa}^{ik} + 1}^{j_{sa} + j_{sa}^{ik} - j_{sa}} \binom{(j_i)}{j_{sa}^{ik} + 1} \sum_{j_i + j_{sa} - s}^{(j_i)} \binom{(j_i)}{l_{ik} + s - l - j_{sa}^{ik} + 1} \\ & \sum_{j_i}^{n} \binom{(j_i)}{j_s + 1} \sum_{n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{n_{is} + \mathbb{k} - j_s + 1} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\ & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\ & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j_{sa}=l_i+j_{sa}-s)}^{(\quad)} \sum_{(j_{sa}+s-l-j_{sa}^{ik}+2)}^{(\quad)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{sa}=n+l_k-j_s+l_{ik}-l_{k_1})}^{(n_{sa}+1)} \sum_{(n_{sa}+l_{k_2}-j_{ik}+1)}^{(n_{sa}+1)} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{ik}+j_{sa}-l_{k_2})} \sum_{(n_{sa}+j_{sa}-j_{ik}-l_{k_3})}^{(n_{sa}+j_{sa}-j_{ik}-l_{k_3})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
 & \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_i+n-l}^{l_{ik}+s-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k_1}}^{j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{(\cdot)} \sum_{(n_{sa}+j_{sa}-j_i)}^{(\cdot)} \\
 & \frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (j_i + j_{sa} - s - 2 \cdot s)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \geq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_i \leq D - l_s + s - l - 1 \wedge$$

$$l_s \geq n < n \wedge I = l_k > 0$$

$$j_{sa} < j_i - 1 \wedge j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$j_{sa}^s \geq 7 \wedge j_{sa}^s + l_k \wedge$$

$$l_{k_z}: z = 3 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!(n_i-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_{sa}-n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-n_{sa}-1)!(n_i+j_{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)!(n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)!(j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)!(n-j_i)!} + \\
 & \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2 - 1)!}$$

$$\frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i - k_3 - 1)!}$$

$$\frac{(n_s - 1)!}{(n + j_i - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})!}$$

$$\frac{(l_i - l_j)!}{(n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_s = j_{ik} - j_{sa}^{ik} + 1}^{l_i - l_j}$$

$$\sum_{j_i = j^{sa} + s - j_{sa}}^{(l_i + j_s - l - s + 1)}$$

$$\sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{j_s=j_{ik}^{ik}+1}^{()}$$

$$(l_{ik} + j_{sa}^{ik} + 1)$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{n+l_{sa}-D}^{()} \sum_{i=j^{sa}+s-j_{sa}}^{()}$$

$$(l_{ik} + 1)$$

$$\sum_{n_i=n+l_k}^{()} \sum_{n+l_k-j_s}^{()} \sum_{l_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{()}$$

$$\sum_{(n_{ik}+j_{sa}^{ik}-l_{k_2})}^{()}$$

$$\sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i + n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=...}^{...+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{...}^{...+j_s-j_i-\mathbb{k}_1}$$

$$\sum_{...}^{...-j^{sa}-\mathbb{k}_2} \sum_{...}^{...+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_{sa}=n+\mathbb{k}-j^{sa}+1) \cdot (n_s-j_i+1)}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n-\mathbb{k}_1-1)!}{(j_s-2)! \cdot (n_s+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_3-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_2}} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \cdot \frac{(n_{sa}-l_3-l_{k_3}-1)!}{(j_i-n_{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}
 \end{aligned}$$

$$\sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_s \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - j_{sa}^s < j_{sa}^s - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_1 : z = 3 \wedge \mathbb{k}_2 = \mathbb{k}_1 + \mathbb{k}_3 \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + \dots - n - 1)!}{(n_s + \dots - n - 1)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + \dots - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{lk}-D-s}^{l_i+1} \sum_{(l_i+j_{sa}-l-s+1)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_{ik} = n + j_{sa}^{lk} - D - s}^{l_{ik} - l + 1} \sum_{j_i = j^{sa} + s - j_{sa}}^{(n_{is} = n + \mathbb{k} - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_{is} = n + \mathbb{k} - j_s + 1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{(n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3)} \frac{(n_{is} + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_{is} + j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$j_i \geq n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{\mathbb{k}} \sum_{(j_s=j_{ik}+1)}^{\dots} \sum_{j_{ik}=j_{sa}^{ik}}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_{sa}=n+j_{sa}-D)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_s=j_{sa}}^{n+j_{sa}-D} \sum_{n_{is}=n+\mathbb{k}_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{ik}+j_{sa}-\mathbb{k}_2} \sum_{(n_{sa}=n+\mathbb{k}_3-j_{sa}+1)}^{n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \sum_{n_s=n-j_i+1}^{(n_i-n_{is}-1)!} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)} \\
 & \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - l} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(l_i + j_{sa} - l - s + 1)} \sum_{j_{i+1} = j_{sa} + s - j_{sa}}^{(\quad)} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n + k_2 + k_3 + 1)}^{(n_{is} + j_s - \dots - k_1)} \\
 & \frac{(n_{ik} + j_{ik} - j^{sa} - \dots - k_1)! \cdot (n_{sa} + j^{sa} - j_i - k_2)!}{(j^{sa} - j_{i+1} - k_3 - j^{sa} - 1)! \cdot (j_i + 1)!} \\
 & \frac{(n_{is} - n - k_1 - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{ik} - j_{i+1} - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - k_1)!}{(j^{sa} - j_{i+1} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{i+1} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)}
 \end{aligned}$$

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$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - l} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{()} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik}}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{()} \sum_{n_s = n_{sa} + j_{sa} - j_i - k_3}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - s - n + l_i)!}{(D + j_{sa} - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{ik} + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} - j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} > l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq l_i + l_s + s - n = D$

$D > n < n \wedge k = k > 0$

$j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} - j_{sa}^{ik} - 1 < j_{sa}^{ik} - 1 \wedge$

$\{j_{sa}^{ik}, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^{ik}, \dots, k_3, j_{sa}^{ik}\} \wedge$

$s \geq 7 \wedge s = s - l_s \wedge$

$k_2 - k_2 = s - k = k_1 + k_2 + k_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_i + n - D - s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1} \sum_{(j_{sa} = l_i + n + j_{sa} - D - s)}^{(l_i + j_{sa} - l - s + 1)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\ \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\ \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\ \frac{(n_{i_s} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - l_{k_1})!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j^{sa} - n_s - l_{k_3})!} \cdot \\ \frac{(n_s - 1)!}{(n_{i_s} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\ \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\ \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\ \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = l_i + n - D - s + 1)} \\
 & \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(\quad)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\quad)} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} & j_{ik}^{sa} \cdot j_{ik} \cdot j_{sa}^{ik} = \sum_{k=l}^{(n_i - l - D - s)} \sum_{(j_s=2)} \\ & \sum_{(l_i+j_{sa}^{ik}-l-s+1)} \sum_{(j_{ik}+j_{sa}^{ik}-1)} \sum_{(l_i+n+j_{sa}-D-s)} \sum_{(j_i=j^{sa}+s-j_{sa})} \\ & \sum_{(n_i-k)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k-j_s+1)} \sum_{(n_{ik}=n+k_2+k_3-j_{ik}+1)} \\ & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_3)} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

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$$\begin{aligned}
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{(l_s - l + 1)} \frac{(l_i + j_i - l - s + 1)!}{(j_s = l_i + n - s + 1)} \cdot \\
 & \sum_{j_{ik} = j_s + j_{sa}^{ik}} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_i)} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + k} \sum_{(n_{ik} = n + k - j_s + j_{ik} - k_1)} \sum_{(n_{ik} = n + k_2 + k_3 - j_{ik} + 1)} \\
 & \sum_{(n_{sa} = n - k_3 - j^{sa} + 1)} \sum_{n_s = n - j_i + 1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_1)}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_{sa}^{ik})}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (j_i - j_{sa}^{ik} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - 1 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s > D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i < j_i + j_{sa} - s \wedge j^{sa} + j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D - n < l_{sa} < D + l_s - n - 1 \wedge$$

$$D \geq n < l \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_i}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_i-n_{sa}-j^{sa}-k_2)!} \cdot \\
 & \frac{(n_{sa}-n_s-k_3-1)!}{(j_i-n_{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{ik}+s-l-j_{sa}^{ik}+2}^{l_{sa}+s-l-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_{is} - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}
 \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa}^{lk} - j_{sa}^{lk} - l_{sa} - j_{sa}^{sa})!}$$

$$\frac{(l_s - l_i)!}{(n - l_s - l_i)! \cdot (n - j_i)!}$$

$$\sum_{s=1}^l \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_s=l}$$

$$\sum_{j_{ik}=j_s}^{l_s+j_{sa}^{ik}-l} \sum_{j_i=j_i+j_{sa}-s}^{j_i+l_s+l-1} \sum_{j_i=l_s+s-l+1}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n+l_{ik}}^{n+l_s} \sum_{(n_{is}=n+l_{ik}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{ik}+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{j_s=j_{sa}^{ik}+1}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{j_i+j_{sa}-s}^{()} \sum_{n+s-D-j_{sa}}^{l_s}$$

$$\sum_{n_i=n+l_k}^{()} \sum_{n+l_k-j_s}^{()} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{()}$$

$$\sum_{()} \sum_{()} \sum_{()} \sum_{()} \sum_{()} \sum_{()}$$

$$\frac{(n_i + j_i + \dots - j^{sa} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i + n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{sa} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa} (l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)}$$

$$\sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=n+l-j_s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i)}^{(n_{is}-j_s+\mathbb{k}_1)}$$

$$\frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{is}-\mathbb{k}_1-1)!}{(j_s-2)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

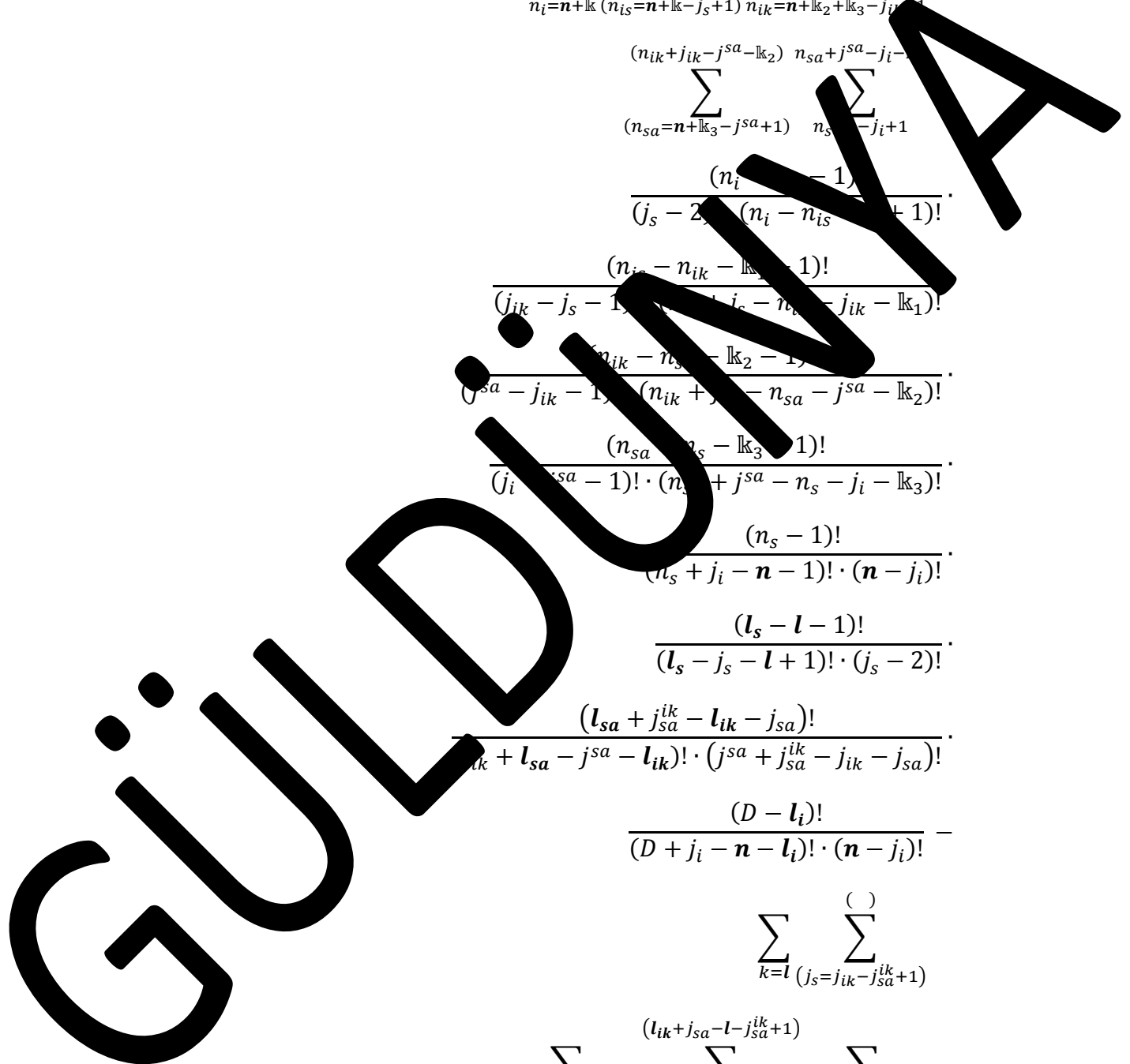
$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_2+l_3-j_{ik}-l_1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_k+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_2}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)!(n_i-n_{is}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_{ik}-n_s-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)!(n_{ik}+j^{sa}-n_s-j_i-l_{k_3})!} \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}
 \end{aligned}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)! \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_s \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \dots \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \dots = \mathbb{k}_1 + \dots + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + \dots - n - 1)!}{(n_s + \dots - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + \dots - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_s = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(j_s - l_i)!} \sum_{j_{ik} = l_{sa} + n - D}^{(l_s - j_s - l)!} \sum_{j_i = j^{sa} + s - j_{sa}}^{(j_s - j_{sa}^{ik} + 1)!} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s + 1)!} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \cdot n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \frac{(n_s + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_s + j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$j_s \geq n - l_i \wedge l_i \neq j_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

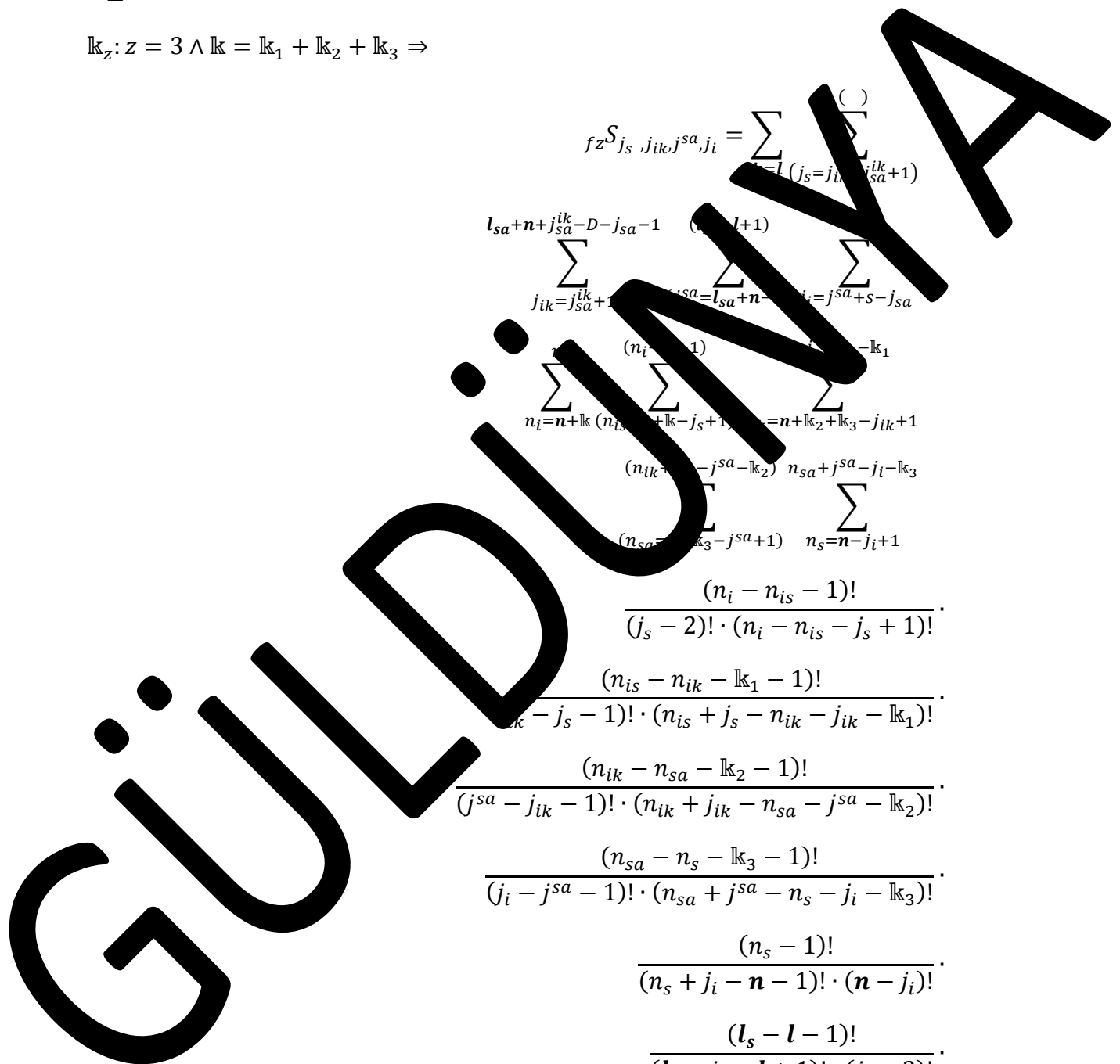
$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{l=1}^{()} \sum_{j_s=j_{ik}+1}^{()} \sum_{j_{sa}=l_{sa}+n-j_{sa}-1}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{j_{ik}=j_{sa}+1}^{()} \sum_{n_i=n+\mathbb{k}}^{(n_i-1)} \sum_{n_{is}=n_{ik}+\mathbb{k}-j_s+1}^{(n_{is}-1)} \sum_{n_{sa}=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_{ik}+j_{sa}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{(n_{sa}-\mathbb{k}_3-j_{sa}+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$



$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)} \\
 & \sum_{j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(l_{sa} - l + 1)} \sum_{j_{ik}^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n + k_2 + l_{sa} - j_s + 1)}^{n_{is} + j_s - k_1} \\
 & \frac{(n_{ik} + j_{ik} - j^{sa} - k_1 - 1)! \cdot (n_{sa} + j^{sa} - j_i - k_1 - 1)!}{(n_{sa} - k_3 - j_s - 1)! \cdot (j_s - 1)!} \\
 & \frac{(n_{is} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)}
 \end{aligned}$$

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$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-lk_3}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa} - 2 \cdot s - lk_1 - lk_2 - lk_3)!}{(n_i - n - lk_1 - lk_2 - lk_3)! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\frac{(j_s - l - 1)!}{(j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_s - n - l_i)! \cdot (n - j_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik}^{ik} - 1 < j_{ik} \leq j_{sa} + j_{sa} - j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{ik} + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} - s \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$

$D + j_s - n < l_{sa} \wedge D + l_s + j_{sa} - j_{sa}^{ik} - 1$

$D > n < n \wedge l = lk > 0$

$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 < j_{sa}^{ik} - 1 \wedge$

$s \in \{j_{sa}^{ik}, \dots, lk_1, j_{sa}^{ik}, \dots, lk_2, j_{sa}^{ik}, \dots, lk_3, j_{sa}^{ik}\} \wedge$

$s \geq 7 \wedge s = j_{sa}^{ik} \wedge$

$lk_2 = j_{sa}^{ik} \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j_{sa}^{ik}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\begin{aligned}
 & \sum_{n_i = n + k}^n \sum_{\substack{(n_i - j_s + 1) \\ (n_{i_s} = n + k - j_s + 1)}} \sum_{\substack{n_{i_s} + j_s - j_{ik} - k_1 \\ n_{ik} = n + k_2 + k_3 - j_{ik} + 1}} \\
 & \sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - k_2) \\ (n_{sa} = n + k_3 - j^{sa} + 1)}} \sum_{\substack{n_{sa} + j^{sa} - j_i - k_3 \\ n_s = n - j_i + 1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l} \sum_{\binom{()}{j_s = j_{ik} - j_{sa}^{ik} + 1}}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{\substack{l_s + j_{sa}^{ik} - l \\ j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}} \sum_{\substack{(l_{sa} - l + 1) \\ (j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}} \sum_{\substack{j_i = j^{sa} + s - j_{sa}}} \\
 & \sum_{n_i = n + k}^n \sum_{\substack{(n_i - j_s + 1) \\ (n_{i_s} = n + k - j_s + 1)}} \sum_{\substack{n_{i_s} + j_s - j_{ik} - k_1 \\ n_{ik} = n + k_2 + k_3 - j_{ik} + 1}} \\
 & \sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - k_2) \\ (n_{sa} = n + k_3 - j^{sa} + 1)}} \sum_{\substack{n_{sa} + j^{sa} - j_i - k_3 \\ n_s = n - j_i + 1}}
 \end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!}$$

$$\frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{sa}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+l-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz = \sum_{j_s=2}^{(l_{sa} + D - j_{sa})} \sum_{j_{ik}=j_s+j_{sa}-1}^{(j_{sa}^{sa-l+1})} \sum_{j_i=j_{sa}+s-j_{sa}}^{(n_i-j_s+1)} \sum_{n_{is}=n+k-j_s+1}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n-j_i+1}^{(n_{sa}+j_{sa}-j_i-k_3)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\begin{aligned}
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l_{sa}+n-j_{sa}+1}^{(l_{ik}-j_{sa}^{ik}+2)} \sum_{j_{ik}=j_s+j_{sa}^{lk}}^{(l_s-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_s}^{(l_s-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_s-l+1)} \\
 & \sum_{n_i=n+k}^{(n_i-l+1)} \sum_{n_{sa}=n+k-j_s+l_{sa}-l_{ik}}^{(n_i-l+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{(n_i-l+1)} \\
 & \sum_{(n_{sa}=n-k_3-j^{sa}+1)}^{(n_{ik}-j^{sa}-k_2)} \sum_{n_{sa}+j^{sa}-j_i-k_3}^{(n_{sa}+j^{sa}-j_i-k_3)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{()} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}^{ik}}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k1}}^{(n_{ik}-j_{ik}+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k2})}^{()} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - l_{k1} - l_{k2} - l_{k3})!}{(n_i - n - l_{k1} - l_{k2} - l_{k3})! \cdot (j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s = D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j_{sa}^{lk} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{lk} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{lk} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{lk} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$\geq n < l_s \wedge l = l_k > 0$$

$$j_{sa} < j_{sa}^{lk} - 1 \wedge j_{sa}^{lk} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$\geq 7 \wedge s + l_k \wedge$$

$$l_{kz}: z = 3 \wedge l_k = l_{k1} + l_{k2} + l_{k3} \Rightarrow$$

$$f_z^S j_s, j_{ik}, j_{sa}, j_i = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)!(n_{is}-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_s-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l-1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - l_2)!} \cdot \\
 & \frac{(n_{sa} - n_{is} - l_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i - l_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n + j_i - 1)!} \cdot (n - j_i)! \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\cdot)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_3} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - l_1 - l_2 - l_3)!}{(n_i - n - l_1 - l_2 - l_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}
 \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$

$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

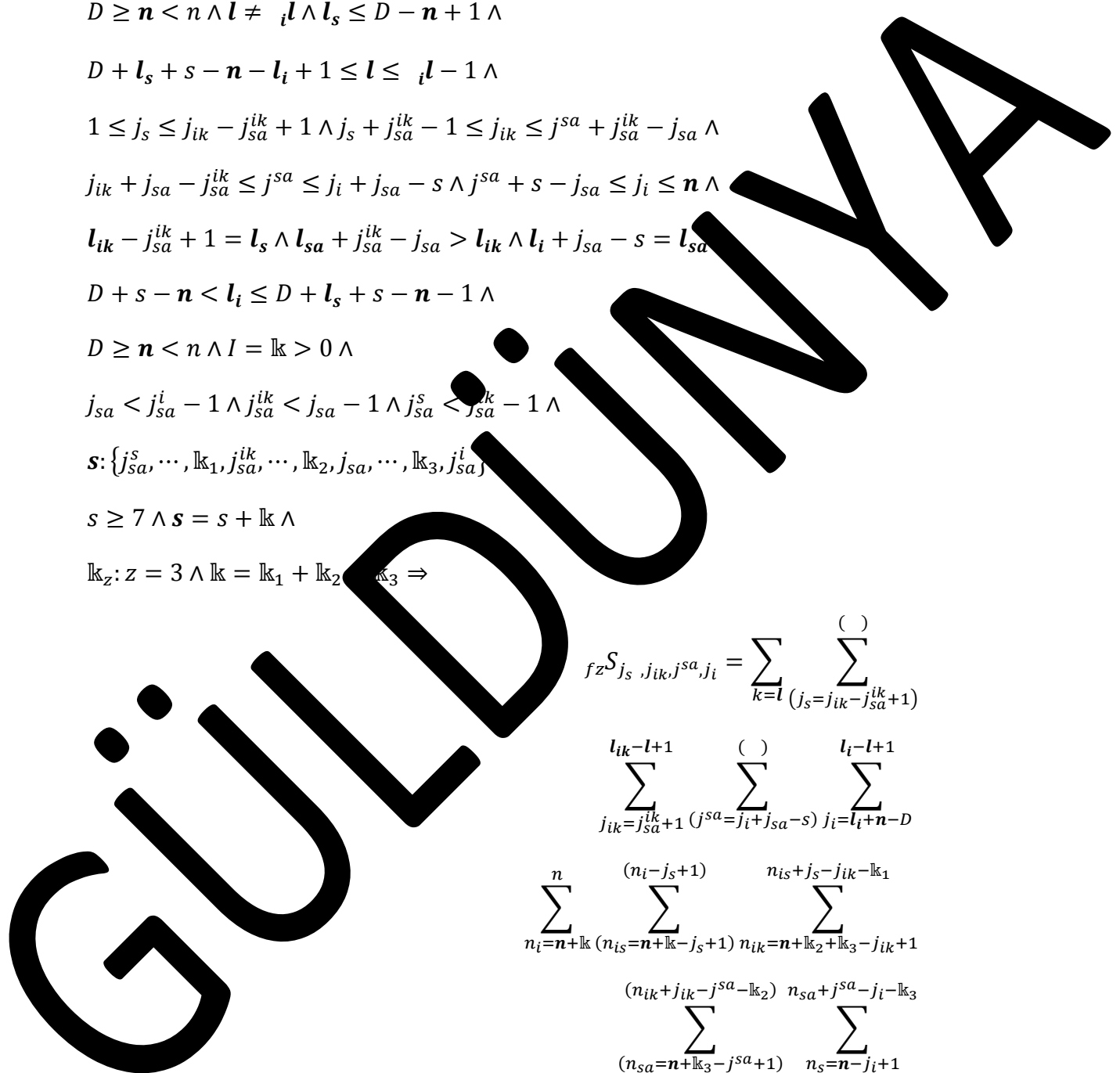
$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$



$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j_{sa}^{lk} - j_{sa}^{ik} - l_{sa})!}$$

$$\frac{(D - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{j_s=1}^{n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{sa}=j^{sa}+j_{sa}}^{n-l_i} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{l_{ik}+s-l-j_{sa}^{ik}+1} \sum_{j_i=l_i+n-D}$$

$$\sum_{j_i=n+\mathbb{k}_1}^n \sum_{(n_{is}=n+\mathbb{k}_1-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^{\dots} = \sum_{j_{sa}^{ik} = j_{sa} - 1}^{(j_{sa}^{ik} - j_{sa}^{ik} + 1)} \sum_{l_i = l - 1}^{(l_i - l + 1)} \sum_{j_{ik} = j_{sa}^{ik} - 1}^{(j_{sa} = j_i + j_{sa} - s)} \sum_{j_i = l_i + n - D}^{(n_i - j_s)} \sum_{n + \mathbb{k} (n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_{sa} = n + \mathbb{k}_3 - j_{sa} + 1}^{(n_{sa} + j_{sa} - j_i - \mathbb{k}_3)} \sum_{n_s = n - j_i + 1}^{(n_i - n_{is} - 1)!} \cdot \frac{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(n_s - 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(j^{sa}=j_i+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(n_i=n+l_k)}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j^{sa}-k_2)}^{()} \sum_{(n_{ik}=j_i-j_{ik}-k_1)}^{()} \sum_{(n_{sa}=j_{sa}-j_i-k_3)}^{()} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot k_1 - k_2 - k_3)!}{(n_i - k_2 - k_3)! \cdot (n_{sa} + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_s - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\quad)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i+1)}^{(n_{is}+j_s-j_{sa}-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n-j_s+1)}^{(n_{ik}-j_{sa}-\mathbb{k}_2+1)} \sum_{(n_{sa}+j_{sa}-n-s-j_i-\mathbb{k}_3)}$$

$$\frac{(n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n-\mathbb{k}_1-1)!}{(n_{is}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(n_{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n-s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

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$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_{sa} - j_i - k_3)! \cdot (s)!}$$

$$\frac{(l_s - l - 1)!}{(j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s \leq j_{sa}^{ik} - 1 \leq j_{ik} - j_{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge j_{sa} + j_{sa}^{ik} - j_{sa} - s - l_i + j_{sa} - s = l_{sa} \wedge$$

$$D - s - n < l \leq D + l_s - s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k_1 = 0 \wedge$$

$$l_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^s, \dots, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}-1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)!(n_{is}-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{is}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_i \leq j^{sa} + j_{sa}^{ik} - l_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_s \leq j_i \leq l_i$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, l_i\} \wedge$$

$$s \geq 7 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \dots + \mathbb{k}_2 + \dots \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_{is} - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - \dots)}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j_{sa}^{lk} - j_{sa}^{ik} - l_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=\dots} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}$$

$$\sum_{i=n+\mathbb{k}_1}^n \sum_{(n_{is}=n+\mathbb{k}_1-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^s = \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}} \sum_{j_{sa}^i=j_{sa}^{ik}+1}^{(j_{sa}^i-j_{sa}^{ik}+1)} \sum_{j_{sa}^s=j_{sa}^{ik}+1}^{(j_{sa}^s-j_{sa}^{ik}+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{(j_i-l_{sa}+n+s-D-j_{sa})} \sum_{n_{is}=n+k-j_s+1}^{(n_{is}-n+k-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{(n_{ik}-n+k_2+k_3-j_{ik}+1)} \sum_{n_{sa}=n+k_3-j_{sa}+1}^{(n_{sa}-n+k_3-j_{sa}+1)} \sum_{n_s=n-j_i+1}^{(n_s+n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\)} \sum_{j_i=l_{sa}-j_{sa}}^{l_s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k)}^{(n_i-j_s+1)} \sum_{n_{ik}=j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j^{sa}-k_2)}^{(\)} \sum_{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot k_1 - k_2 - k_3)!}{(n_i - k_2 - k_3)! \cdot (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_i = l \wedge l_s \leq D - n - 1 \wedge$$

$$D + l_s - s - n - l_i + 1 \leq l \leq l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_s - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_{sa} < n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i-1)}^{(n_{is}+j_s-j_i-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_2+1)} \sum_{(n_{sa}+j^{sa}-n-s-j_i-\mathbb{k}_3)}$$

$$\frac{(n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n-\mathbb{k}_1-1)!}{(n_{is}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(n_{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n-s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_{sa} - j^{sa} - s)! \cdot (l_{k_1} - 1)!}$$

$$\frac{(j_s - l + 1)! \cdot (j_s - 2)!}{(D - j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s - j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s - j_{sa} + j_{sa}^{ik} - j_{sa} - s \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D - j_{sa} - n \leq l_s \leq D - n + j_{sa} - s - 1 \wedge$

$D \geq n < n \wedge l = l_{k_1} = 0 \wedge$

$l_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_s^s, \dots, l_{k_1}, j_s, \dots, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s \leq s + l_{k_1} \wedge$

$l_{k_2}: z = 3 \wedge l_{k_2} = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_{s_3}-l_{k_3}-1)!}{(j_i-n_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_i \leq j^{sa} + j_{sa}^{ik} - l_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq l_i$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, i_s\} \wedge$

$s \geq 7 \wedge s = \dots + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \dots + \mathbb{k}_2 + \dots \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}$$

$$\begin{aligned}
 & \sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - l_2)!} \cdot \\
 & \frac{(n_{sa} - n_{is} - l_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_1}^n \sum_{(n_{is}=n+l_1-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_3} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - l_1 - l_2 - l_3)!}{(n_i - n - l_1 - l_2 - l_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}
 \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\sum_{k=l}^s \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{(j_i=s+1)}^{l_s+s-l} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i - l + 1)!}{(D + j_i - n - l_i)! \cdot (j_i - l)!}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_{sa}=j_i+j_{sa}-s} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \sum_{j_s=2}^{l_s-l+1}$$

$$\sum_{n+\mathbb{k}}^{(n_i-j_s)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_i}^{(\cdot)} \sum_{(j^{sa}=j_i)}^{(\cdot)} \sum_{l_s=s-l}^{(\cdot)} \sum_{l_s+1}^{(\cdot)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_i-k_1)}^{(\cdot)} \sum_{(j_s-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n_{ik}+j^{sa}-k_2)}^{(\cdot)} \sum_{(n_{sa}+j^{sa}-j_i-k_3)}$$

$$\frac{(n_i + j_i + j^{sa} - j^{sa} - 2 \cdot k_1 - k_2 - k_3)!}{(n_i - k_2 - k_3)! \cdot (n_i + j_i + j^{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_i \leq l \wedge l_i \leq l + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_s - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned}
 f_{z^S} \mathcal{S}_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 &\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 &\frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j^{sa}-n_{ik}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j^{sa}-1)! \cdot (n_s=n-j_i+l_{k_3}-1)!} \cdot \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_s-2)! \cdot (n_{is}-n_{ik}-j_s+1)!} \\
 &\frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \cdot \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \\
 &\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)} \\
 &\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l}^{\binom{()}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\substack{(l_s+j_{sa}-l) \\ (j^{sa}=j_{sa}+1)}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{\substack{() \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

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$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^i < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik} - l} \sum_{(j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i=j^{sa} + s - j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - l_s + 1)!}$$

$$\frac{(n - l_i)!}{(n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{-l+1} \sum_{(j_s=2)}$$

$$\sum_{l_s+j^{sa}}^{-l+1} \sum_{(j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n+l_{ik}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+l_{ik}-j_s+1)} \sum_{n_{ik}=n+l_{ik_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{j_s=j_{ik}^{ik}+1}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}-l}^{l_s+j_{sa}^{ik}-l} \sum_{j_{ik}+j_{sa}-j_s} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l} \sum_{n+l-j_s} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{ik}+j_{ik}+j_{sa}-l_{k_2})} \sum_{n_s=n_{sa}+j_{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i + n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\geq n < n \wedge l \neq i \wedge l \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_s - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = l_{k_1} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_{k_1} \wedge$$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz \mathcal{S}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-\mathbb{k}_1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{(n_{sa}+j^{sa}-\mathbb{k}_3)}^{n_{sa}+j^{sa}-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{\binom{()}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}}} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{\binom{()}{n_{is}=n+lk-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2}} \sum_{n_s=n_{sa}+j_{sa}-j_i-lk_3}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{lk} - 2 \cdot s - lk_1 - lk_2 - lk_3)!}{(n_i - n - lk_1 - lk_2 - lk_3)! \cdot (n + j_i + j_{sa} - j_{sa}^{lk} - s)!}$$

$$\frac{(j_s - l - 1)!}{(j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D)}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{lk} + 1 \wedge j_s + j_{ik}^{lk} - 1 < j_{ik} \leq j_{sa}^{lk} + j_{sa} - j_{sa}^{lk} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j_{sa}^{lk} \leq j_{ik} + j_{sa} - s \wedge j_{sa}^{lk} - j_{sa} - s \leq n \wedge$

$l_{ik} - j_{sa}^{lk} + 1 > l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq n + l_s + s - n - 1 \wedge$

$D \geq n < n \wedge n = lk > 0$

$j_{sa}^{lk} < j_{sa}^{lk} - 1 \wedge j_{sa}^{lk} < j_{sa} - 1 \wedge j_{sa}^{lk} < j_{sa}^{lk} - 1 \wedge$

$s \in \{j_{sa}^{lk}, \dots, lk_1, j_{sa}^{lk}, \dots, lk_2, j_{sa}^{lk}, \dots, lk_3, j_{sa}^{lk}\} \wedge$

$s \geq 7 \wedge s = j_{sa}^{lk} \wedge$

$lk_2 = j_{sa}^{lk} \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^S = \sum_{k=l}^{(j_{ik}-j_{sa}^{lk}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa}} \sum_{\binom{()}{j_{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_{sa} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_s+s-l+1}^{l_s-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}}
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\cdot)} \\
& \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(\cdot)} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\cdot)} \sum_{j_i = l_i + n - D}^{l_s + s - l} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{j_{ik}=j_s}^{(l_s - j_{sa} - l)} \sum_{(j_s=2)}^{(l_s - j_{sa} - l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_s - j_{sa} - l)} \sum_{(n_{is}=n+k-j_s+1)}^{(n_i - j_s + 1)} \sum_{(n_{ik}=n+k_2+k_3-j_{ik}+1)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_3)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{j_s - l + 1} \sum_{j_{sa} = j_{sa} - l + 1}^{j_s - l + 1} \sum_{j_{ik} = j_{sa} + j_{ik} - j_{sa} - l + 1}^{j_s - l + 1} \sum_{j_{sa} = j_{sa} - l + 1}^{j_s - l + 1} \sum_{j_{ik} = j_{sa} + j_{ik} - j_{sa} - l + 1}^{j_s - l + 1} \\
 & \sum_{j_{sa} = n + k_3 - j_{sa} - 1}^n \sum_{j_{ik} = n + k_2 + k_3 - j_{ik} + 1}^{n - j_s + 1} \sum_{j_{sa} = n + k_3 - j_{sa} - 1}^{n - j_s + 1} \sum_{j_{ik} = n + k_2 + k_3 - j_{ik} + 1}^{n - j_s + 1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(n_i+j_s+1)} \sum_{j_{sa}^{lk}=j_{sa}^{ik}+1}^{(n_i-n-l-k_1-k_2-k_3)} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-1)}^{(n_i-n-l-k_2-k_3)} \sum_{n_{ik}=n_{is}+j_{sa}^{lk}-l_k_1}^{(n_i-n-l-k_3)} \frac{(n_i + j_i + j_{sa} - j_{sa}^{lk} - 2 \cdot s - l_k_1 - l_k_2 - l_k_3)!}{(n_i - n - l - l_k_2 - l_k_3)! \cdot (n + j_i + j_{sa} - j_{sa}^{lk} - 2 \cdot s)!} \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$

$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{lk} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j_{sa}^{lk} \leq j_i + j_{sa} - j_{sa}^{lk} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{lk} + 1 > l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_s \leq D + j_i + s - n - 1 \wedge$

$D > n < n \wedge I = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{lk} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^{i-1}, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2}^{n_{is}+j_s-j_{ik}-k_1} \dots -j_{ik}+1$$

$$(n_{ik}+j_{ik}-j^{sa}-k_2) \dots +j^{sa}-j_i-k_3$$

$$(n_{sa}=n+k_3-j_{sa}^{ik}) \dots n_s=n-j_i+1$$

$$\frac{(n_{is}-n_{is}+1)!}{(j_s-2)! \cdot (n_{is}+1)!}$$

$$\frac{(n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-j_{ik}-k_1)!}$$

$$\frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{ik}-j_{sa}^{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-k_2)!}$$

$$\frac{(n_{sa}-n_s-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-l-s+1}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - l_{k_1})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_{i_s} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l}^{\binom{()}{}} \sum_{(j_s=j_{i_k}-j_{s_a}^{i_k}+1)}^{\binom{()}{}}$$

$$\sum_{j_{i_k}=l_i+n+j_{s_a}^{i_k}-D-s}^{l_s+j_{s_a}^{i_k}-l} \sum_{(j_i=j_{i_k}+j_{s_a}-j_{s_a}^{i_k})}^{\binom{()}{}} \sum_{j_i=j_{s_a}+s-j_{s_a}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

$$\sum_{(n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})}^{\binom{()}{}} \sum_{n_s=n_{s_a}+j^{s_a}-j_i-l_{k_3}}$$

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$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j_s=2)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l - 1)!}{(l_s - j_i - l + 1)! \cdot (l - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_i + n - D - s + 1)} \\
 & \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(j_{sa}^{ik} - l - s + 1)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(l_s - l)$$

$$(j_s = l_i + n - D - s)$$

$$j_{ik} = j_s + l_{ik} - 1 \quad (j_{sa}^{ik} = j_s + l_{sa} - j_{sa}^{ik}) \quad j_{ik} = j_s - j_{sa}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k)}^{(j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \sum_{n_s=n_{sa}+j_{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > l_i \wedge n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{(l_s-l+1)} \sum_{j_s=2}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_i+j_{sa}-s+1)} \sum_{j_{sa}=l_i+n+j_{sa}-l}^{(l_i+j_{sa}-s+1)} \sum_{j_i=j_{sa}+s-j_{sa}}^{(l_i+j_{sa}-s+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^{(n_i+n+1)} \sum_{n_{ik}=n+\mathbb{k}-j_s}^{(n_i+n+1)} \sum_{n_{sa}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_i+n+1)}$$

$$\sum_{n_{sa}=1}^{(n_{ik}+j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

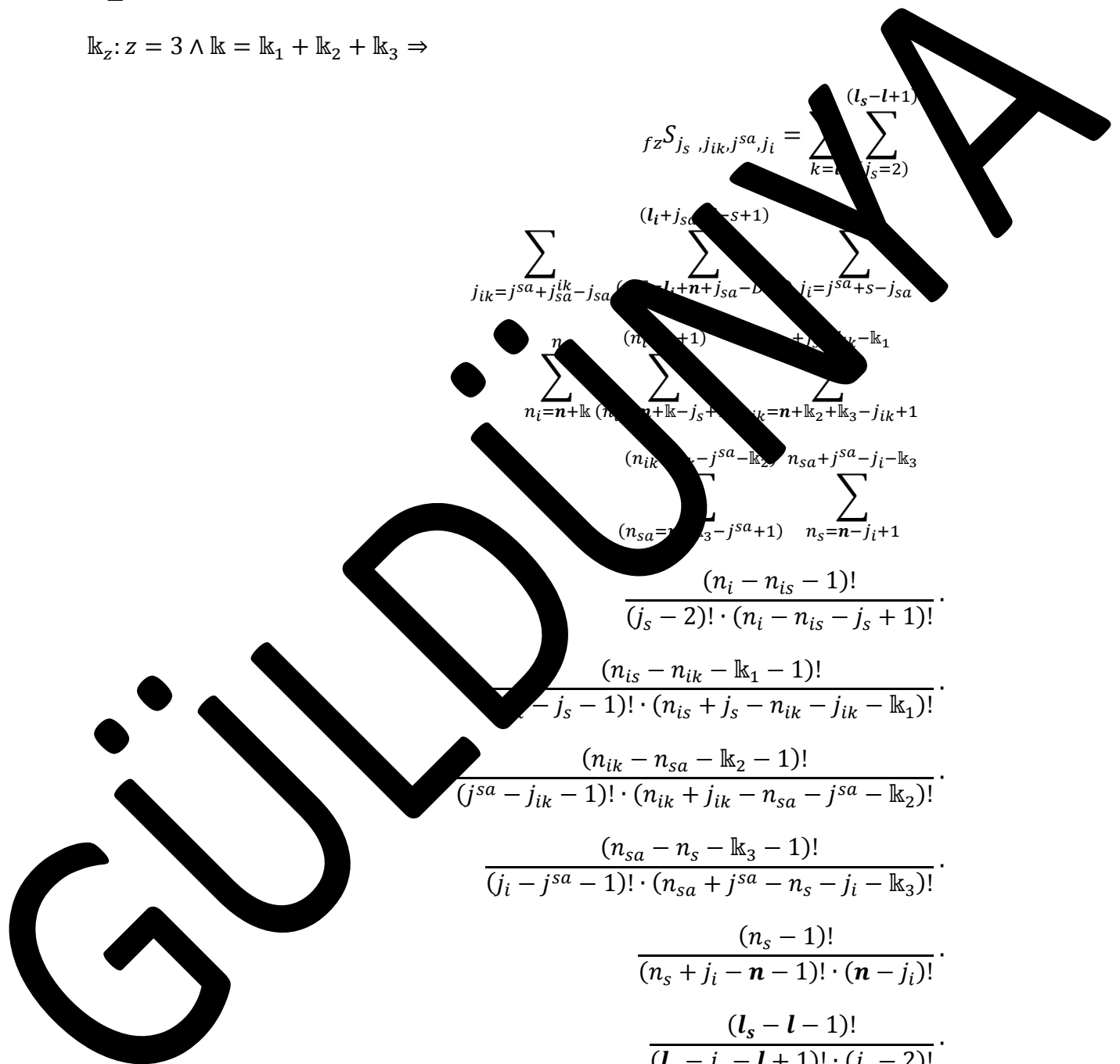
$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$



$$\sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa}} \sum_{(l_s+j_{sa}-l)}^{(l_s+j_{sa}-l)} \sum_{j_i=j_{sa}+s-j_{sa}^{ik}}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_1})}^{()} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{lk_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s = D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq a + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{lk} - j_{sa} \leq j_{sa}^{lk} - j_i + j_{sa} - s \wedge a - j_{sa} \leq j_i \leq n \wedge$$

$$l_{k_1} - j_{sa}^{lk} + 1 > 0 \wedge l_{sa} + j_{sa}^{lk} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{lk} - n < l_{sa} \leq D + l_s + j_{sa}^{lk} - n - 1 \wedge$$

$$\geq n < n \wedge l = l_k > 0$$

$$j_{sa} < j_{sa}^{lk} - 1 \wedge j_{sa}^{lk} - 1 \wedge j_{sa}^s < j_{sa}^{lk} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$> 7 \wedge s + l_k \wedge$$

$$l_k: z = 3 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{(\quad)}{\quad} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)!(n_{is}-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)!(n_{is}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{(\quad)}{\quad} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_s+s-l+1}^{l_{sa}+s-l-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-k_2) \\ (n_{sa}=n+k_3-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-k_3 \\ n_s=n-j_i+1}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2 - 1)!}$$

$$\frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i - k_3 - 1)!}$$

$$\frac{(n_s - 1)!}{(n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - l_{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{()}{n_{is}=n+k-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - l_s + 1)!}$$

$$\frac{(n - l_i)!}{(n - j_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{-l+1} \sum_{(j_s=2)}$$

$$\sum_{j^{sa}+j_{sa}}^{-l+1} \sum_{(l_s+j_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n+l_{ik}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+l_{ik}-j_s+1)} \sum_{n_{ik}=n+l_{ik_2}+l_{ik_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{j_s=j_{ik}^{ik}+1}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{sa}+j_s^{lk}}^{(j_{sa}=l_{sa}+n)} \sum_{j_i=j_{sa}^{sa}+s-j_{sa}}^{(j_s+1)}$$

$$\sum_{n_i=n+l_k}^{(n+l_k-j_s)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{()}$$

$$\sum_{(n_i=n_{ik}+j_{ik}^{ik}-l_{k_2})}^{()} \sum_{n_s=n_{sa}+j_{sa}^{sa}-j_i-l_{k_3}}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i + n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j_{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$j_s \geq n < n \wedge l \neq l_i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j_{sa}^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_s - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_i=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i)}^{(n_{is}-n-\mathbb{k}_1)}$$

$$\frac{(n_{is}-n-\mathbb{k}_1-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n-\mathbb{k}_1-1)!}{(j_s-2)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

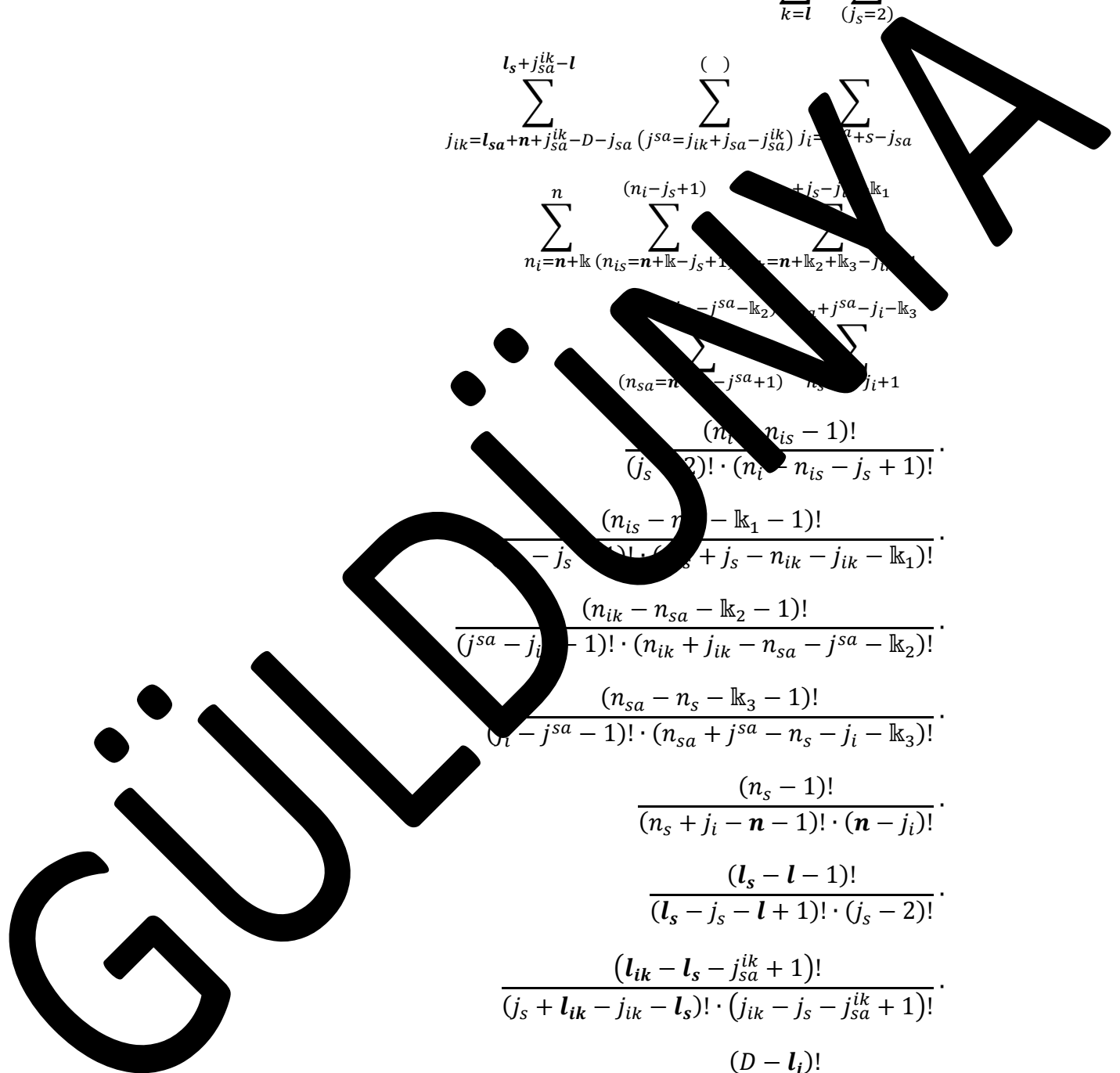
$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

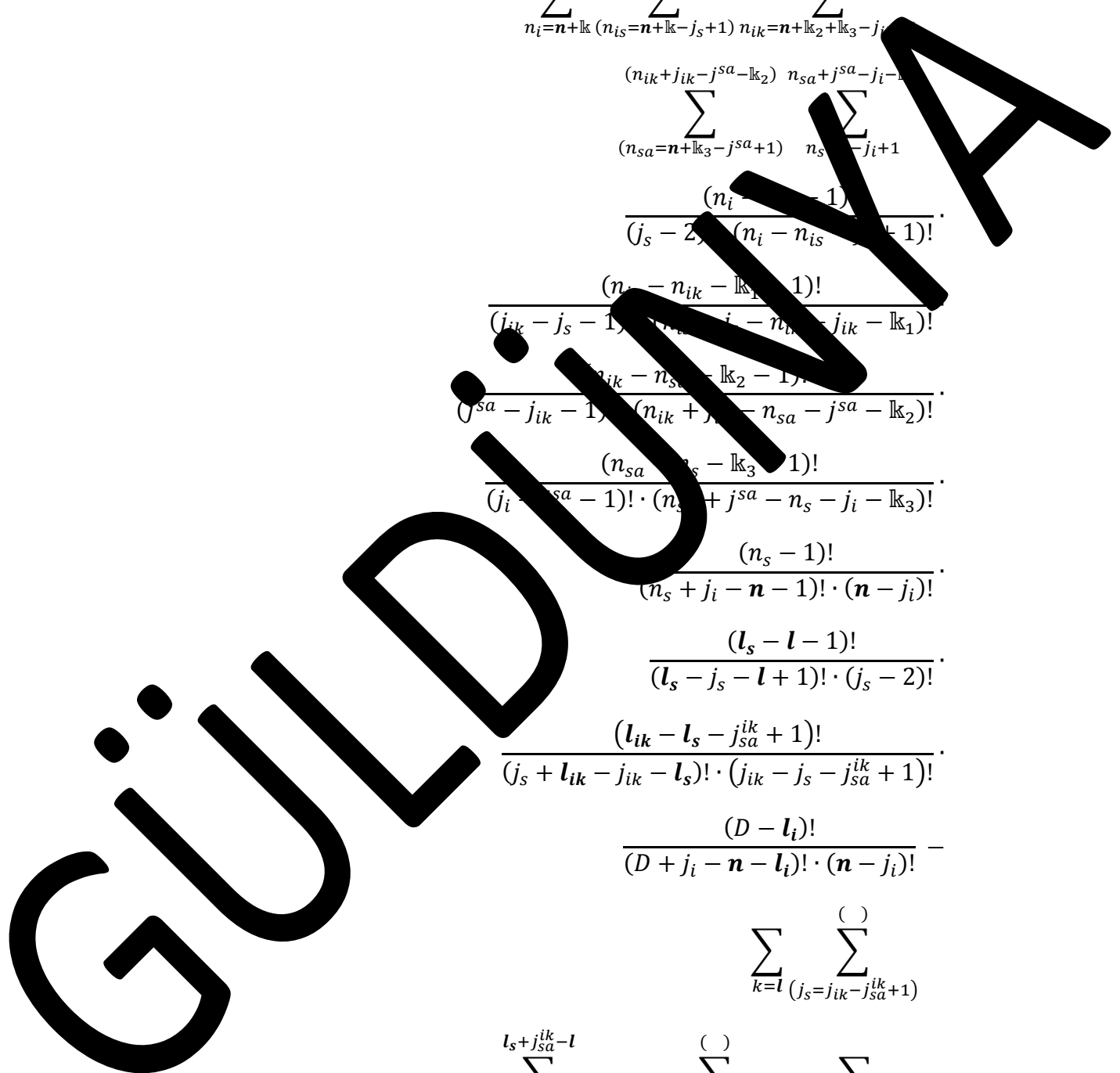
$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$



$$\begin{aligned}
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_i}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \frac{(n_{sa}-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}
 \end{aligned}$$

$$\sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}
 \end{aligned}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_s \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_i \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - j_{sa}^i + 1 \wedge j_{sa} < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \dots \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \dots = \mathbb{k}_1 + \dots + \mathbb{k}_3 \Rightarrow$$

$$fz^{S_{j_s, j_{ik}, j^{sa}, j_i}} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + n - n - 1)!}{(n_s + n - n - 1)!} \cdot \frac{(n - l - 1)!}{(n - l - 1)!} \cdot \frac{(j_s - l - 1)!}{(j_s - l - 1)!} \cdot (j_s - 2)! \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - l_s - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{l_s-l-1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l-1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{sa}+j_{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l-1)} \sum_{j_s=j_s}^{j_s+l-k} \sum_{j_{sa}=j_{sa}+1}^{j_{sa}+l-k}$$

$$\sum_{j_s=j_s+j_{sa}^{ik}-1}^{j_s+j_{sa}^{ik}-1} \sum_{j_{ik}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{j_i=j^{sa}+s-j_{sa}}^{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_{ik}=n_{ik}}^{(n_i-l-1)} \sum_{n_{is}=n_{is}+l-k-j_s+1}^{n_{is}+l-k-j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_{sa} + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$n \geq n_s \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

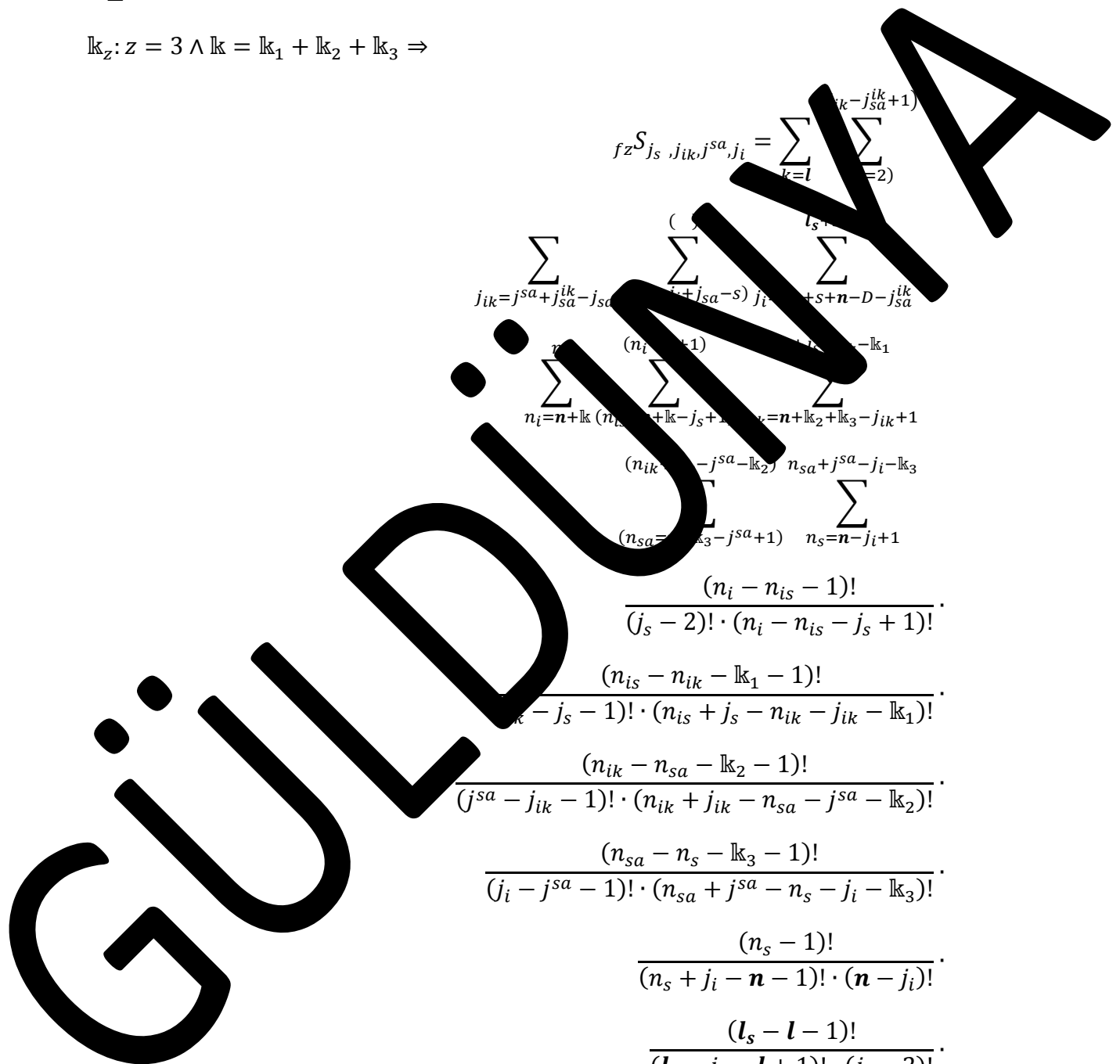
$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{\mathbb{k}-j_{sa}^{ik}+1} \sum_{l=2}^{\mathbb{k}-j_{sa}^{ik}+1} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{\dots} \sum_{j_i=j_{sa}-s}^{\dots} \sum_{n_i=n+\mathbb{k}}^{\dots} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{\dots} \sum_{n_{ik}=n_{sa}+j_{sa}-j_i-\mathbb{k}_1}^{\dots} \sum_{n_{sa}=n_{ik}-j_{sa}-\mathbb{k}_2}^{\dots} \sum_{n_s=n-j_i+1}^{\dots} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$



$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_s+s-l+1}^{(l_{ik}+s-l-j_{sa}^{ik}+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{(n_{is}+j_s-j_{ik}-l_{k_1})} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j_{sa}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j_{ik}-1)! \cdot (n_s=n-j_i+1)!} \\
 & \frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}+j_s+1)!} \\
 & \frac{(n_{ik}-n_{is}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_{ik}-n_s-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_{ik}+s+n-D-j_{sa}^{ik}}^{()}
 \end{aligned}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{(l_s - l - 1)! \cdot (l - 2)!}{(l_s - j_s - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i - l_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} + j_{sa} - s = l_s \wedge$

$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_{sa} + j_{sa}^{ik} - n = l_{ik}$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{sa} < j_{sa}^{ik} - 1$

$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\}$

$s \geq 7 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \dots + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\begin{aligned}
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-k_2) \\ (n_{sa}=n+k_3-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-k_3 \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1 - 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i - k_3 - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{sa}^{ik} - l + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_s+j_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(s+j_{sa}-l)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(s+j_{sa}-l)} \sum_{(j_s=j_{sa}+j_s^{ik})}^{(s+j_{sa}-l)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(s+j_{sa}-l)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_i-j_s+1)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(n_i-j_s+1)} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z^S j_s, j_{sa}^{ik}, j_i = \sum_{k=l}^{j_{ik}-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(j_s=2)}$$

$$\sum_{j_{ik}=n-D}^{l_s+j_{sa}^{ik}-l} \sum_{(j_s=2)}^{(j_s=2)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j_s=2)}$$

$$\sum_{n_i=n+\mathbb{k}}^{n_i=n+\mathbb{k}-j_s+1} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

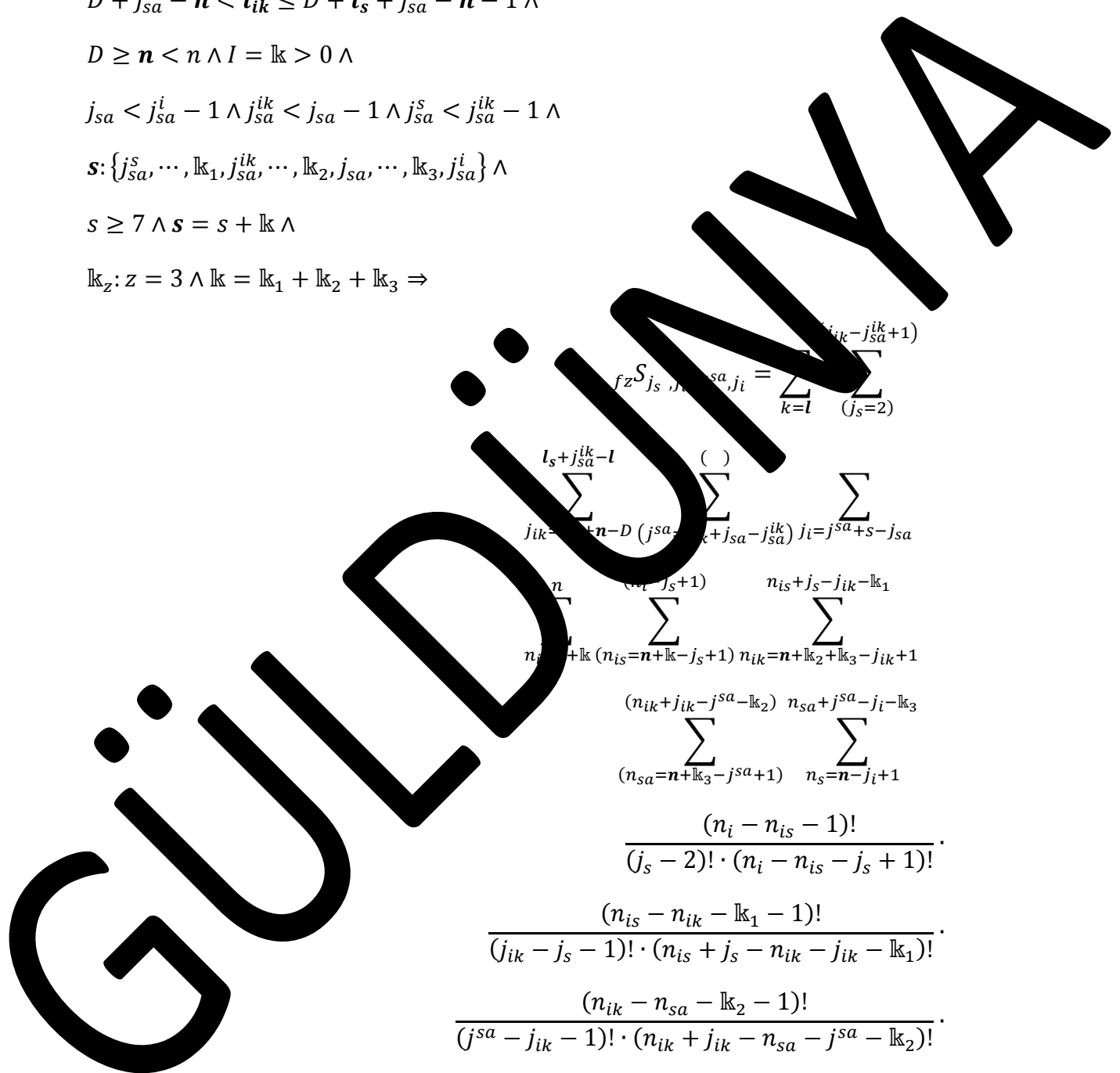
$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$



$$\begin{aligned}
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{l_s - l + 1} \sum_{j_s=2}^{(l_s - l + 1) - k} \\
 & \sum_{j_{ik}=l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{j_{sa}=j_{ik} + j_{sa} - j_{ik}}^{(j_{sa} - j_{ik} + 1) - k} \sum_{j_i=j_{sa} + s - j_{sa}}^{(j_i - j_{sa} + 1) - k} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_{is}+1) - k} \sum_{n_{ik}=n+l_k+l_{k3}-j_{ik}+1}^{(n_{ik}+1) - k} \\
 & \sum_{n_{sa}=n+l_k-j_{sa}-l_{k2}}^{(n_{ik}+1) - k - j_{sa} - l_{k2}} \sum_{n_{sa}+j_{sa}-j_i-l_{k3}}^{(n_{sa}+1) - k - j_{sa} - l_{k3}} \\
 & \sum_{n_s=n-j_i+1}^{(n_{sa}+1) - k - j_{sa} + 1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k1} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k2})!} \cdot \\
 & \frac{(n_{sa} - n_s - l_{k3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j_{sa}+s-1}^{(\cdot)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k_1}}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{(\cdot)} \sum_{(n_{sa}+j_{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \geq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} \wedge j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa}^{ik} \wedge l_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq j_{sa}^{ik} + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_i - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$l_{k_z}: z = 3 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \binom{()}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_1}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)!(n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)!(n_{is}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \binom{()}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

$$\begin{aligned}
& \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - \mathbb{k}_2 - 1)!} \cdot \\
& \frac{(n_{sa} - n_{is} - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n + j_i - 1)!} \cdot (n - j_i)! \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}
\end{aligned}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z \mathcal{S}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{(l_i - l + 1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - 1)! \cdot (j_{ik} - j_s - l_s + 1)!}$$

$$\frac{(D - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j}^n \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_{ik}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_i+j_{sa}-s}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{j_i=n+\mathbb{k}_1}^n \sum_{(n_{is}=n+\mathbb{k}_1-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\sum_{j_i = j^{sa} + s - j_{sa}}^{l_{ik} - 1} \sum_{j_{sa} = j_i}^{l_s - l_i} \sum_{j_{ik} = l_{ik} + n - D}^{(n_i - j_s - 1)} \sum_{n_{is} = n + k - j_s + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{n_{sa} = n + k_3 - j^{sa} + 1}^{n_{sa} + j^{sa} - j_i - k_3} \sum_{n_s = n - j_i + 1}^{(n_i - n_{is} - 1)!} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_i+j_{sa}-j_{sa}^{ik})} \sum_{(j_{sa}^{ik}=j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_i-j_s-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-k_2)} \sum_{(n_{sa}+j_{sa}-j_i-k_3)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot k_1 - k_2 - k_3)!}{(n_i - k_2 - k_3)! \cdot (n_i + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_i = l \wedge l_s \leq D - n - 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + l_s + s - n - 1 < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_i + j_{sa}^{ik} - l - s + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{()} \sum_{j_i = n + j^{sa} - j_{sa}}^{()}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + j_{sa} - j_{sa}^{ik} - \mathbb{k}_1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{sa} - j_{sa}^{ik} - \mathbb{k}_1)}^{(n_{ik} + j_s - j_{sa} - \mathbb{k}_1)}$$

$$\frac{(n_{sa} = n - j^{sa} - \mathbb{k}_2 - \mathbb{k}_3 - j_i + j_{sa} - j_i - \mathbb{k}_3)}{(n_{sa} = n - j^{sa} + 1)} \sum_{j_i + 1}^{()}$$

$$\frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{is} - \mathbb{k}_1 - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

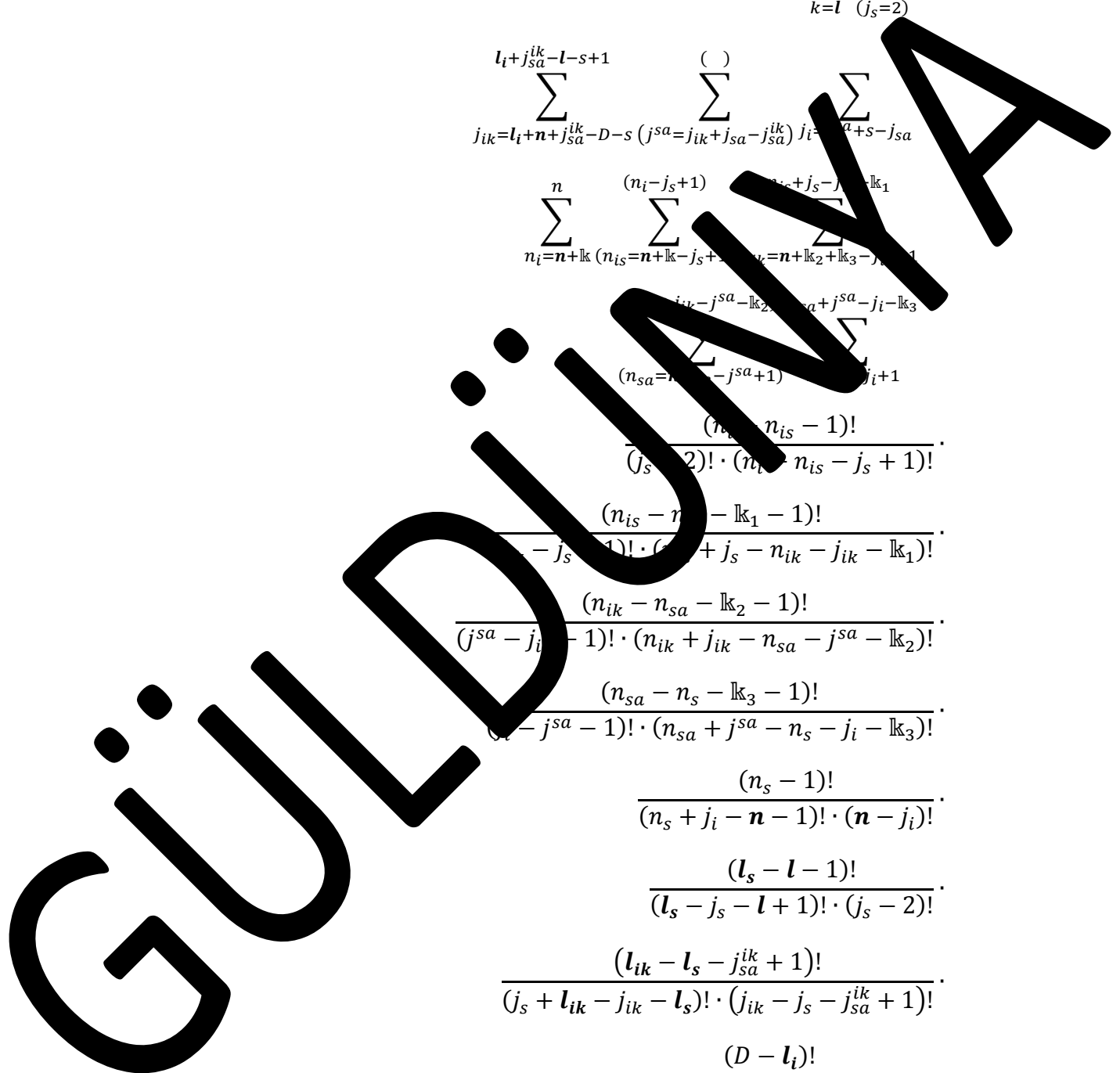
$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)}$$



$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{\binom{()}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}}} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{\binom{()}{n_{is}=n+lk-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2}} \sum_{n_s=n_{sa}+j_{sa}-j_i-lk_3}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa} - 2 \cdot s - lk_1 - lk_2 - lk_3)!}{(n_i - n - lk_1 - lk_2 - lk_3)! \cdot (n + j_{sa} - j_i - s)!}$$

$$\frac{(j_s - l - 1)!}{(j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D)}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s < j_{sa}^{ik} - 1 \leq j_{ik} - j_{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - lk_2 \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$l_{sa} - j_{sa} - n - lk_3 \leq D - n - l_i + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = n - 0 \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, lk_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$$

$$s \leq l \wedge j_{sa}^s \leq s + lk \wedge$$

$$lk_z: z = 3 \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow$$

$$f^z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{(\cdot)}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-l-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+l_k-j_s+1}} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}-1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{\binom{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})}{n_{sa}=n+l_{k_3}-j^{sa}+1}} \sum_{n_{s_i}=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{\binom{(n_i-1)}{(j_s-2)!} \cdot (n_i-n_{is}+1)!}{(n_i-n_{ik}-l_{k_1}-1)!} \\
 & \frac{(j_{ik}-j_s-1)! \cdot (j_s-n_{is}-j_{ik}-l_{k_1})!}{(n_{ik}-n_{s_i}-l_{k_2}-1)!} \\
 & \frac{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!}{(n_{sa}-n_s-l_{k_3}-1)!} \\
 & \frac{(j_i-n_{sa}-1)! \cdot (n_{s_i}+j^{sa}-n_s-j_i-l_{k_3})!}{(n_s-1)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}
 \end{aligned}$$

$$\sum_{k=l}^{\binom{(\cdot)}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{(\cdot)}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+l_k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(n_i-j_s+1)}
 \end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_i \leq j^{sa} + j_{sa}^{ik} - l_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_s \leq j_i \leq l_i$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_i \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, \dots, l_i\} \wedge$$

$$s \geq 7 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \dots + \mathbb{k}_2 + \dots \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\cdot)} \\
& \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(l_s + j_{sa} - l)} \sum_{(j^{sa} = l_{sa} + n - D)} \sum_{j_i = j^{sa} + s - j_{sa}} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_{z, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{sa}+n+1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_s=j_{ik}-j_{sa}^{ik}}$$

$$\sum_{j_{sa}=j_{ik}-j_{sa}^{ik}}^{l_s+j_{sa}^{ik}-l} \sum_{j_i=j_{sa}+s-j_{sa}} (j_{sa}=j_{ik}-j_{sa}^{ik}) j_i=j_{sa}+s-j_{sa}$$

$$\sum_{n_{is}=n+l_s-j_s+1}^n \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-k_3}$$

$$\frac{(n_i - n - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D - n - 1 \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{(l_s - l + 1)} \sum_{j_s=2}^{l_{ik} + s - 1} \sum_{j_{ik}=j_{sa} + j_{sa}^{ik} - j_{sa}}^{(j_i + j_{sa} - s)} \sum_{j_i=n+s-D-j_{sa}^{ik}}^{(n_{ik} + 1)} \sum_{n_i=n+\mathbb{k}}^{(n_{is} + \mathbb{k} - j_s + 1)} \sum_{n_{sa}=n+\mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{(n_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{(n_{sa} = \mathbb{k}_3 - j_{sa} + 1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_{ik}+s+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_1)}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s = D - n + 1 \wedge$

$D + l_s + s - n - l_i + 1 \leq l \leq \dots - 1 \wedge$

$1 \leq j_{ik} - j_{sa}^{ik} + \dots \wedge j_s + j_{sa}^{ik} - 1 \dots \geq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \dots \leq j_i + j_{sa} - s \dots + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge \dots + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$\dots + j_{sa}^{ik} - \dots < l_{ik} \leq D \dots l_s + j_{sa}^{ik} - n - 1 \wedge$

$D \geq \dots < n \wedge l \dots \wedge$

$j_{sa} < j_{sa}^i \dots \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n+l_{k_3}-j_{sa}^{ik}+1)}^{(n_{ik}+j_{ik}-j^{sa}+j_{sa}^{ik}-j_i-l_{k_3})} \sum_{n_s=n-j_i+l_{k_3}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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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_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{(l_s - l - 1)! \cdot (l - 2)!}{(l_s - j_s - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i - l_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

$D + l_s + s - n - l_i + 1 \leq l \leq i - 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq j_{ik} + j_{sa} - j_{sa}^{ik}$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} - l_i + j_{sa} - j_{sa}^{ik} \wedge$

$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1$

$D \geq n < n \wedge l = i > 0$

$j_s < j_{sa}^l - j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^s, \dots, \mathbb{k}_3, j_{sa}^l\} \wedge$

$s \geq 7, l = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-l_{k_1} \\ (n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1)}} \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \frac{(n_s - 1)!}{(n_{sa} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-l} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l-j_s+1)}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

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$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^i < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-l-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa}^{lk} - j_{sa}^{lk} - l_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_{sa} - l_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{sa}-l+1)} \sum_{j_i=l_{ik}+j_{sa}^{ik}-l-s+2}^{l_i-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_{sa}^{ik} = j_{sa}^{ik} - j_{sa}}^{(j_{sa}^{ik} - j_{sa})} \sum_{j_i = j_i + j_{sa} - s}^{(j_i + j_{sa} - s)} \sum_{j_i = s+1}^{l_{ik} + j_{sa}^{ik} - l - s + 1} \\
& \sum_{n_{is} = n + l_k}^{(n_i - 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - l_{k_1}}^{(n_i - 1)} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - l_{k_2}}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - l_{k_2})} \sum_{n_s = n_{sa} + j^{sa} - j_i - l_{k_3}}^{(n_s = n_{sa} + j^{sa} - j_i - l_{k_3})} \\
& \frac{(j_i + j_{sa} - j^{sa} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$n - l \neq i \wedge l \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

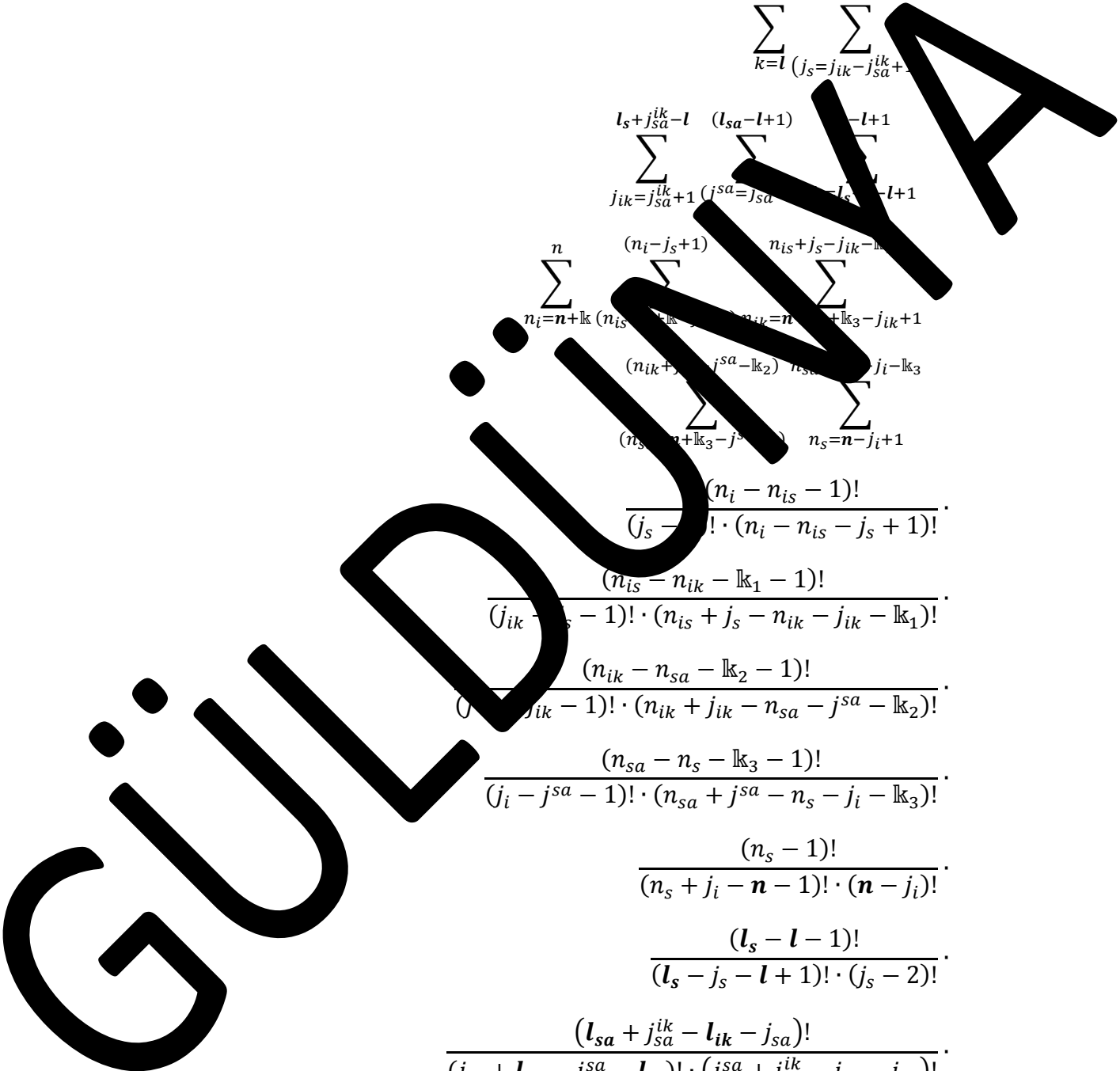
$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{l=1}^{()} \sum_{j_s=j_{ik}+1}^{j_{sa}^{ik}+1} \sum_{j_{sa}+j_{sa}^{ik}}^{(j_i+j_{sa}-s)} \sum_{j_{ik}+1}^{(j_{sa}+1)} \sum_{j_i=s+1}^{l-1} \sum_{n_i=n+k}^{(n_i-1)} \sum_{n_{is}=n+k-j_s+1}^{(n_{is}-1)-k_1} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{(n_{ik}-1)-j_{sa}-k_2} \sum_{n_{sa}=n-k_3-j_{sa}+1}^{n_{sa}+j_{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(k - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + \dots)}^{(\quad)} \frac{\sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_s + j_{sa}^{ik} - l} (l_{sa} - l + 1)^{-l+1}}{(j^{sa} = j_{sa} - l_s - l + 1)} \cdot \sum_{n_i = n + k}^n \sum_{(n_{is} = n - k)}^{(n_i - j_s + 1)} \sum_{(n_{is} + j_s - j_{ik} - l)}^{(n_{is} = n - k + k_3 - j_{ik} + 1)} \sum_{(n_{ik} + j_{ik} - n_{sa} - j_i - k_3)}^{(j^{sa} - k_2)} \sum_{(n_s = n - j_i + 1)}^{(n_s = n - k_3 - j_s)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$



$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^a+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=s}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_1)}^{()} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D) j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i = 0 + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^a + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_{sa}^a \leq j_i + j_{sa} - s \wedge j_{sa}^a - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa}^a \wedge l_{sa}^a + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k_1 + k_2 + k_3 \wedge$$

$$j_{sa} < j_{sa}^a - 1 \wedge j_{sa}^{ik} < j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \dots, k_1, j_{sa}^s, \dots, j_{sa}^a, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k: z = 2 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} (l_{ik}+j_{sa}^{ik}-l-s+1) \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n (n_i-j_s+1) \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_i}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-k_1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \frac{(n_{sa}-j_s-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}
 \end{aligned}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{ik}+j_{sa}^{ik}-l-s+2)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{i_k} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{i_k} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

$$\sum_{k=l}^{\binom{)}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\substack{(l_{ik}+j_{sa}^{ik}-l-s+1) \\ (j^{sa}=j_{sa}+1)}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot \frac{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}{(l_s - l - 1)! \cdot (l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_s \leq n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s > l_s \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\}$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l - 1)!}{(l_s - j_i - l + 1)! \cdot (l - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_i - l_{sa} - 1)!}{(j^{sa} + l_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D + l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{\binom{D}{j_s}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{\binom{D}{j_s}} \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_s + j_{sa}^{ik} - l} \sum_{(j^{sa} = l_s + j_{sa} - l + 1)}^{(l_{sa} - l + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i) \cdot (n - j_i)!} \cdot \\
& \sum_{j_s=l}^{j_s=j_{ik}-j_{sa}^{ik}+1} \sum_{j_{ik}=j_s}^{j_s+l} \sum_{j_{sa}=j_{sa}^{ik}+1}^{j_s+l} \sum_{j_i=j^{sa}+s-j_{sa}}^{j_s+l} \\
& \sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}^i} = \sum_{k=l}^{j_s=j_{ik}+1} \dots$$

$$\sum_{j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j_{sa}^{ik}+j_{sa}-j_{sa}^i)+1}^{(l_{sa}-l+1)} \sum_{(j_{sa}^i-j_{sa})+1}^{l_i-l+1} \dots$$

$$\sum_{n+l}^n \sum_{(n_{is}=n+l_{ik}+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+k_2+k_3-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-k_1} \dots$$

$$\sum_{(n_{sa}=n+k_3-j_{sa}+1)}^{(n_{ik}+j_{sa}-j_{sa}^i-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-k_3} \dots$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+...)}^{(\)}$$

$$\sum_{j_{ik}=j_{sa}^{lk}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}-j_{sa}^{lk}-j_{sa}^{lk})}^{(\)}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_i+j_s-j_{ik}-lk_1)}^{(\)}$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}-lk_2)}^{(\)} \sum_{(n_{sa}+j^{sa}-j_i-lk_3)}^{(\)}$$

$$\frac{(n_i + j_i + \dots - j^{sa} - 2 \cdot \dots - lk_1 - lk_2 - lk_3)!}{(n_{sa} - lk_2 - lk_3)! \cdot (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l = l \wedge l_i = D + s - l \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + \dots \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \dots + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 = l_s - j_{sa}^{lk} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = lk > 0 \wedge$$

$$j_i < j_i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, lk_1, j_{sa}^{ik}, \dots, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + lk \wedge$$

$$lk_z: z = 3 \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow$$

$$\begin{aligned}
 f_{zS} S_{j_s, j_{ik}, j_{sa}, j_i} &= \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 &\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-}^{l_i-l+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 &\frac{(n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j_{sa}^{ik}-1)! \cdot (n_s=n-j_i+l_{k_3})!} \cdot \frac{(n_{sa}-n_{is}-1)!}{(j_s-l+2)! \cdot (l_s-j_s+1)!} \\
 &\frac{(n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-j_{ik}-j_{ik}-l_{k_1})!} \\
 &\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{ik}-j_{sa}^{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j_{sa}^{ik}-l_{k_2})!} \\
 &\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j_{sa}^{ik}-1)! \cdot (n_{sa}+j_{sa}^{ik}-n_s-j_i-l_{k_3})!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 &\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}^{ik}-l_{ik})! \cdot (j_{sa}^{ik}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 &\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}^{ik}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}^{ik}-s)!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 &\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}
 \end{aligned}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{(n_s=n_{sa}+j_{sa}-j_i-l_{k_3})}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!}$$

$$\frac{(l_s - l - 1)!}{(j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - \dots)}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{ik} + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} - j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - s > l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge l = l_s = 0 \wedge$

$j_s < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{ \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^{ik}, \dots, l_{k_3}, j_{sa}^{ik} \} \wedge$

$\geq 7 \wedge \dots = s + l_k \wedge$

$l_{k_z}: z = 3 \wedge l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$

$$f_z S_{j_s, j_{ik}, j_{sa}^{ik}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 1)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_s \leq n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s > l_s \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i, \dots, k_3, j_{sa}^l\}$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_i - l_{sa} - 1)!}{(j^{sa} + l_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{\binom{()}{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} & f_z \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{\dots} \sum_{j_i=l_i+n-D}^{\dots} \\ & \sum_{j_{ik}=j_{sa}^{ik}+1}^{n_i-j_s+1} \sum_{j_{sa}=j_{sa}^i-n-D}^{n_{is}+j_s-j_{ik}-k_1} \\ & \sum_{j_{ik}=j_{sa}^{ik}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \sum_{j_{sa}=n-j_i+1}^{n_{sa}+j_{sa}-j_i-k_3} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\ & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\ & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \end{aligned}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (j_i)!}$$

$$\sum_{j_{sa}^{ik+1}}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik+1}}^{l_{ik}-l} \sum_{j_{sa}^{ik+1}}^{(l_{sa}-l)} \sum_{j_i=l_{ik}+s-l-j_{sa}^{ik+2}}^{l_i-l+1}$$

$$\sum_{j_{ik}=n+l_{k_1}}^{(n_i-j_s)} \sum_{j_{sa}^{ik+1}}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n+l_{k_3}-j_{sa}^{ik+1})}^{(n_{ik}+j_{ik}-j_{sa}^{ik+1}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}^{ik+1}-j_i-l_{k_3}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$\sum_{k=l}^{(\cdot)} \sum_{j_s=j_{ik}+j_{sa}^{ik}+1}^{(\cdot)} \sum_{l_{ik}+j_{sa}^{ik}+1}^{(\cdot)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}}^{(\cdot)} \sum_{j^{sa}=j_i+j_{sa}-s}^{(\cdot)} \sum_{j_i=l_i+n-D}^{(\cdot)}$$

$$\sum_{n_i=n+l_k}^{(\cdot)} \sum_{n+l_k-j_s}^{(\cdot)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(\cdot)}$$

$$\sum_{(n_{ik}+j_{ik}+j_{sa}^{ik}-l_{k_2})}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i + n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_s - j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa} < j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^l\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\ \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_i+j_{sa}-s)}^{(j_i+j_{sa}-s)} \sum_{l_i+n-D}^{l_s+s-l} \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i+1)}^{+j_s-j_i-\mathbb{k}_1} \\ \frac{(n_{is}-j_s+1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)! \cdot (n_{sa}-n_s-\mathbb{k}_3-1)!} \cdot \\ \frac{(n_{is}-n_i-\mathbb{k}_1-1)!}{(j_s-1)! \cdot (n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\ \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \\ \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \\ \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\ \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\ \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\ \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\ \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_s+s-l}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{ik}+j_{ik}-j^{sa}+j_s-j_i-k_3)}^{(n_{ik}+j_{ik}-j^{sa}+j_s-j_i-k_3)} \\
 & \frac{(n_{sa}-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}+j_s+1)!} \\
 & \frac{(n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{ik}-j_s-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 & \frac{(n_{sa}-n_s-k_3-1)!}{(j_i-j_s-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}
 \end{aligned}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{()}{j^{sa}=j_i+j_{sa}-s} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-lk_2)}^{()} \sum_{n_s=n_{sa}+j_i-j_{i-lk_3}}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - lk_1 - lk_2 - lk_3)!}{(n_i - n - lk_1 - lk_2 - lk_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot$$

$$\frac{(j_s - l - 1)!}{(j_i - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{()}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik} - 1 < j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} - s \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq n + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = lk > 0$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{lk_1} + j_{sa} - 1 < j_{sa}^{lk_2} < j_{sa}^{lk_3} < j_{sa}^{ik} - 1 \wedge$$

$$S: \{j_{sa}^s, \dots, lk_1, j_{sa}^{ik}, \dots, lk_2, j_{sa}^i, \dots, lk_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s - lk \wedge$$

$$lk_2 = s - lk = lk_1 + lk_2 + lk_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{\binom{()}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{()}{}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

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$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!}$$

$$\frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(n - l - 1)!}{(n - l - 1)! \cdot (j_s - l - 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \frac{(l_i + l_{sa} - l_{sa} - s)!}{(j_i + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}} \frac{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)}{(j^{sa}=l_i+n+j_{sa}-D-s)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z^S(j_s, j_{ik}, j_{sa}^{ik}, j_i) = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\ \sum_{j_{ik}=j_{sa}^{ik}+1}^{sa+j_{sa}^{ik}-j_{sa}} (l_i+n+j_{sa}-D-s-1) \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-l+1} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\ \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\ \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\ \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!} \cdot \\
 & \frac{(l_i - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{j_s = j_{ik} - j_{sa}^{ik} + 1}^{l_i - l + 1} \sum_{j_i = j^{sa} + s - j_{sa}}^{n + j_{sa} - D - s} \sum_{n_{is} = n + \mathbb{k}_2 - j_s + 1}^{n_{is} = n + \mathbb{k}_2 - j_s + 1} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1} \\
 & \frac{(n_i - j_s + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{j_s=l}^{l_s} \sum_{j_{ik}=j_s-l+1}^{l_s+l+1} \sum_{j_{sa}=j_{ik}-j_{sa}^{ik}}^{l_i-l+1} \sum_{j_i=j_{sa}+s-j_{sa}}^{l_i-l+1} \cdot \\
 & \sum_{n_i=0}^n \sum_{n_{is}=n+l_1+l_2+l_3}^{n+l_1+l_2+l_3+1} \sum_{n_{ik}=n+l_2+l_3-j_{ik}+1}^{n+l_1+l_2+l_3+1} \sum_{n_{sa}=n+l_3-j_{sa}^{ik}}^{n+l_1+l_2+l_3+1} \sum_{n_s=n-j_i+1}^{n+l_1+l_2+l_3+1} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - l_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - l_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

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$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+...)}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_i+n+j_{sa}-l)}^{(l_s+j_{sa}-l)}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_i+j_s-j_{ik}-lk_1)}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}-lk_2)}^{(\cdot)} \sum_{(n_{sa}+j^{sa}-j_i-lk_3)}^{(\cdot)}$$

$$\frac{(n_i + j_i + \dots - j^{sa} - 2 \cdot \dots - lk_1 - lk_2 - lk_3)!}{(n_i - j_s - lk_2 - lk_3)! \cdot (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_i \leq l \wedge l_s \leq D - n - 2 \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + \dots \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \dots + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s - j_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - l_i \leq D + l_s + s - n - 1 \wedge$$

$$\dots \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$lk_z: z = 3 \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-l}^{l_i-l+1}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+lk-j_{ik}-lk_1}^{n_{is}+j_s-j_{ik}-lk_1}$$

$$\sum_{(n_{ik}+j_{ik}-j_{sa}^{ik}-lk_2)}^{n_{sa}+j^{sa}-j_{ik}-lk_2} \sum_{(j_i=n-j_i+1)}^{n_{sa}+j^{sa}-j_{ik}-lk_2}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - j_{ik} - lk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - lk_1)!}$$

$$\frac{(j^{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - lk_2 - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - lk_2)!}$$

$$\frac{(n_{sa} - n_s - lk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - lk_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\begin{aligned}
 & \sum_{j_{ik} = l_i + n + j_{sa}^{lk} - D - s}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{lk})}^{(l_{sa} - l + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 + k_3 - j_i}^{n_{is} + j_s - j_{ik} - k_1} \\
 & \sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s = j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_i - n_{is} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_s - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{ik} + j_s - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(l_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{\binom{()}{}} \sum_{(j_s = j_{ik} - j_{sa}^{lk} + 1)}^{\binom{()}{}} \\
 & \sum_{j_{ik} = l_i + n + j_{sa}^{lk} - D - s}^{l_{ik} - l + 1} \sum_{\binom{()}{}}^{(\binom{()}{})} \sum_{j_i = j^{sa} + s - j_{sa}}^{(\binom{()}{})}
 \end{aligned}$$

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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_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{(l_s - l - 1)! \cdot (l - 2)!}{(l_s - j_s - 1)! \cdot (l - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i > l_{ik} \wedge l_{sa} + j_{sa} - s > l_i \wedge$$

$$D + s - n < l_i \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\begin{aligned}
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_{is} - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot (n - j_i)! \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=\mathbf{l}_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{\mathbf{l}_s+j_{sa}^{ik}-\mathbf{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\mathbf{l}_{sa}-\mathbf{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{l}_i-\mathbf{l}+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s - l - 1)!} \cdot \frac{(n_s - l - 1)!}{(j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(l_i + l_{sa} - l_{sa} - s)!}{(j_i + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\cdot)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} f_z S_{j_s, j_{sa}, j_i}^{j_{sa}, j_i} &= \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)} \\ &\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-l+1} \sum_{j_i=l_i+n-D} \\ &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\ &\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ &\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \end{aligned}$$

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!} \cdot \\
& \frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{j=0}^{D-s+1} \frac{(l_{sa} - k - 1)!}{(j_s + j_{sa}^{lk} - 1)!} \frac{(l_i - l + 1)!}{(j_{sa} + j_{sa}^{lk} + j_{sa} - j_{sa}^{lk})!} \frac{(l_i - l + 1)!}{(j_i = j_{sa} + s - j_{sa})!} \\
& \sum_{j=0}^{(n_i - j_s)} \sum_{k=1}^{n_{is} + j_s - j_{ik} - k_1} \frac{(n_i - j_s)!}{(n + k)!} \frac{(n_{is} = n + k - j_s + 1)!}{(n_{ik} = n + k_2 + k_3 - j_{ik} + 1)!} \\
& \sum_{n_{sa} = n + k_3 - j_{sa} + 1}^{(n_{ik} + j_{ik} - j_{sa} - k_2)!} \sum_{n_s = n - j_i + 1}^{(n_{sa} + j_{sa} - j_i - k_3)!} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{i=l_i+n-s+1}^{(l_{ik} - j_{sa}^{ik} + 2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}} \sum_{j_{sa}^{lk}=j_{ik}+j_{sa}-j_s} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk} \sum_{n_i=n+lk-j_s} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-lk_1}$$

$$\sum_{(n_i+n_{ik}+j_{ik}-j_{sa}-lk_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-lk_3}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa} - 2 \cdot s - lk_1 - lk_2 - lk_3)!}{(n_i + n - lk_1 - lk_2 - lk_3)! \cdot (n + j_i + j_{sa} - j_{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{lk} \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{lk} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_s - j_{sa}^{lk} = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = lk > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, lk_1, j_{sa}^{ik}, \dots, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-l+1} \sum_{(j_i=n-D)}^{(l_i+n-D)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_s+1)}^{(n_{is}+j_s-j_i-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n_{is}-j^{sa}+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i-l+1)} \sum_{j_i=j^{sa}+s-j}^{(l_i-l+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}+j_s-j_i-k_3)}^{(n_{ik}+j_{ik}-j^{sa})} \\
 & \sum_{(n_{sa}=n+k_3-j_i+1)}^{(n_{sa}+j_s-j_i-k_3)} \sum_{n_s=n-j_i}^{(n_{sa}+j_s-j_i-k_3)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)}
 \end{aligned}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{\binom{()}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}}} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{\binom{()}{n_{is}=n+lk-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2}}^{(n_i-j_s+1)} \sum_{n_s=n_{sa}+j_{sa}-j_i-lk_3}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{lk} - 2 \cdot s - lk_1 - lk_2 - lk_3)!}{(n_i - n - lk_1 - lk_2 - lk_3)! \cdot (n + j_{sa} - j_{sa}^{lk} - s)!}$$

$$\frac{(j_s - l - 1)!}{(j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D)}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{lk} + 1 \wedge j_s < j_{sa}^{lk} - 1 \leq j_{ik} - j_{sa}^{lk} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j_{sa}^{lk} \leq j_i + j_{sa} - s \wedge j_{sa}^{lk} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} - l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$l_{sa} - s - n < l_{sa} \leq D + l_s \wedge s - n - 1 \wedge$$

$$D \geq n < n \wedge l = l_{sa} = 0 \wedge$$

$$j_{sa} < j_{sa}^{lk} - 1 \wedge j_{sa}^{lk} < j_s - 1 \wedge j_{sa}^s < j_{sa}^{lk} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, lk_1, j_{sa}^{lk}, \dots, j_{sa}, \dots, lk_3, j_{sa}\} \wedge$$

$$s \leq l \wedge s \leq s + lk \wedge$$

$$lk_z: z = 3 \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^{lk}+1}}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{i_1}}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{is}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=l}^{\binom{()}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{()}{}} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{()}{}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\binom{()}{}} \sum_{j_i=l_i+n-D}^{l_{ik}+s-l-j_{sa}^{ik}+1}
 \end{aligned}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{(l_s - l - 1)! \cdot (l - 2)!}{(l_s - j_s - 1)! \cdot (l - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_s \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} - l_i + j_{sa} - l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = i > 0 \wedge$$

$$j_s < j_{sa}^{ik} - j_{sa}^{ik} < j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^s, \dots, \mathbb{k}_3, j_{sa}^s\} \wedge$$

$$s \geq 7, l_s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - l_{k_1})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a} - j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
 & \frac{(l_i + j_{s_a} - l_{s_a} - s)!}{(j^{s_a} + l_i - j_i - l_{s_a})! \cdot (j_i + j_{s_a} - j^{s_a} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l}^{\binom{()}{j_s=j_{i_k}-j_{s_a}^{i_k}+1}} \sum_{\binom{()}{j_s=j_i+j_{s_a}-s}}$$

$$\sum_{j_{i_k}=j^{s_a}+j_{s_a}^{i_k}-j_{s_a}} \sum_{\binom{()}{j^{s_a}=j_i+j_{s_a}-s}} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_i \leq j^{sa} + j_{sa}^{ik} - l_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_s \leq j_i \leq l_i$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, i\} \wedge$$

$$s \geq 7 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \dots + \mathbb{k}_2 + \dots \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-l+1} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!}$$

$$\frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(j^{sa} + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

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$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^i < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa} + j_{sa}^{ik} - j_{sa}}^{(j_i + j_{sa} - s)} \sum_{(j^{sa}=j_{sa} + 1)}^{l_s + s - l} \sum_{j_i=s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - 1)! \cdot (j_{ik} - j_s - l + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - j_s - l + 1)! \cdot (j_i + j_s - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \\
 & \sum_{k=j^{sa} + j_{sa}^{ik} - j_{sa}}^{(l_{sa} - l + 1)} \sum_{(j^{sa}=j_{sa}+1)}^{l_i - l + 1} \sum_{j_i=l_s+s-l+1}^{l_i - l + 1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-l_{sa}}^{(n_i-1)} \sum_{j_i=s+1}^{l_s+s-l} \binom{(\cdot)}{j_{sa}^{ik}+1}$$

$$\sum_{n+l_k}^{(n_i-1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(n_{is}=n+l_k-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_{sa}=n_{sa}+j^{sa}-j_i-l_{k_3})}$$

$$\frac{(n - j_i + j_{sa} - j^{sa} - 2 \cdot s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n - l - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S j_s, j_{ik}, j_{sa}, j_i = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_{ik}=j_{sa}^s+j_{sa}^{ik}-j_{sa}}^{(l_s+j_s-1)} \sum_{(j_i=j_{sa}^s+j_{sa}^{ik}-j_{sa})}^{(l_i+1)} \sum_{n_i=n_s}^n \frac{(n_{is}=n_s+1) \cdot (n_{ik}=n_s+j_{ik}+1)}{(n_{sa}=n_s-j_{sa}^s+1) \cdot (n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa}^s + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa}^s - s)!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_i-l+1)} j_{i_s+s-j_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+k_2)}^{n_{is}+j_s-k_1} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-j_i-1)!}{(n_{sa}+k_3-j_s-1)! \cdot (n_{ik}-j_i+1)!} \cdot \frac{(n_{is}-1)!}{(n_{is}-2)! \cdot (n_{is}-j_s+1)!} \\
 & \frac{(n_{is}-k_1-1)!}{(j_{ik}-k_1-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_s-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 & \frac{(n_{sa}-n_s-k_3-1)!}{(j^{sa}-j_s-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^a+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j_{sa}^a=j_{sa}+1)} \sum_{j_i=j_{sa}^a+s-j_{sa}}^{(\cdot)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_1})}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{lk_1} - l_{k_1} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D) j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq l \wedge l_i = 0 + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j_{sa}^a + j_{sa}^{lk} - j_{sa} \wedge$

$j_{ik} + j_{sa}^{lk} - j_{sa} \leq j_{sa}^a \leq j_i + j_{sa} - s \wedge j_{sa}^a - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{lk} + 1 > l_{sa} \wedge l_{sa} + j_{sa}^{lk} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge I = l_{k_1} = 0 \wedge$

$j_{sa} < j_{sa}^{lk} - 1 \wedge j_{sa}^{lk} < j_s - 1 \wedge j_{sa}^s < j_{sa}^{lk} - 1 \wedge$

$s: \{j_s^s, \dots, l_{k_1}, j_{sa}^{lk}, \dots, j_{sa}, \dots, l_{k_3}, j_{sa}^l\} \wedge$

$s \geq 7 \wedge s \leq s + l_{k_1} \wedge$

$z: z = 2 \wedge k = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{lk}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{lk}+1}^{l_s+j_{sa}^{lk}-l} \binom{(\quad)}{\quad} \sum_{j_i=j_{sa}^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+l_k}^n \binom{(n_i-j_s+1)}{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n+l_{k_2}+l_{k_3}-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i-l_{k_1}}$$

$$\frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot$$

$$\frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!}$$

$$\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-l_{k_2})!}$$

$$\frac{(n_{sa}-l_{k_3}-1)!}{(j_i-n_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-l_{k_3})!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{lk}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{lk}+1)!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{lk}-l+1}^{l_{ik}-l+1} \binom{(\quad)}{\quad} \sum_{j_i=j_{sa}^{sa}+s-j_{sa}}^{l_i-l+1}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - l_{k_1})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_i - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(l_i + j_{s_a} - l_{s_a} - s)!}{(j^{s_a} + l_i - j_i - l_{s_a})! \cdot (j_i + j_{s_a} - j^{s_a} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l}^{\binom{)}{}} \sum_{(j_s=j_{i_k}-j_{s_a}^{i_k}+1)}^{\binom{)}{}}$$

$$\sum_{j_{i_k}=j_{s_a}^{i_k}+1}^{l_s+j_{s_a}^{i_k}-l} \sum_{(j^{s_a}=j_{i_k}+j_{s_a}-j_{s_a}^{i_k})}^{\binom{)}{}} \sum_{j_i=j^{s_a}+s-j_{s_a}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

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$$\frac{\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}}{1}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_s \leq n$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_i \wedge l_i + j_{sa} - s > l_s \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i, \dots, k_3, j_{sa}^l\}$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j^{ik} + 1)!}$$

$$\frac{(l_i + j_i - l_{sa} - s)!}{(j^{sa} + l_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_{z, \dots, j_{ik}, j_{sa}, j_{sa}^i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_i + j_{sa} - s)} \sum_{(j_{ik}=j_{sa} + j_{sa}^{ik} - j_{sa})}^{(j^{sa} = l_{sa} + n - D)} \sum_{(j_i = l_i + n - D)}^{(l_s + s - l)}$$

$$\sum_{i=n+k}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + k - j_s + 1)}^{(n_{is} + j_s - j_{ik} - k_1)} \sum_{(n_{sa} = n + k_3 - j_{sa} + 1)}^{(n_{ik} + j_{ik} - j_{sa} - k_2)} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j_{sa} - j_i - k_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!} \cdot \\
& \frac{(l_i - l + 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k_1=0}^{l_s - l + 1} \sum_{j_s=2}^{l_s - l + 1} \sum_{k_2=0}^{l_i - l + 1} \sum_{j_i=l_s + s - l + 1}^{l_i - l + 1} \\
& \sum_{k_3=0}^{n - l_s} \sum_{n_{is}=n + k_3 - j_s + 1}^{n - l_s} \sum_{n_{ik}=n + k_2 + k_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \\
& \sum_{n_{sa}=n + k_3 - j_{sa} + 1}^{(n_{ik} + j_{ik} - j_{sa} - k_2)} \sum_{n_s=n - j_i + 1}^{n_{sa} + j_{sa} - j_i - k_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{j_s=j_{ik}^{(k)}+1}^{()}$$

$$\sum_{j_{ik}=j^{sa}+1}^{()} \sum_{(j^{sa}=j_i+s)}^{()} \sum_{j_i=l_i+n-D}^{()}$$

$$\sum_{n_i=n+k_1}^{()} \sum_{n_i=n+k_2-j_s}^{()} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}^{()}$$

$$\sum_{(n_{ik}=n_{ik}+j_{ik}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i + n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$n \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_i+n+j_{sa}-D-s-1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-l+1} \sum_{l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i-1)}^{(n_i+j_s-j_i-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n_{sa}-j^{sa}+1)}^{(n_{sa}-j^{sa}-\mathbb{k}_2-1)} \sum_{(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)}^{(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)}$$

$$\frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{is}-\mathbb{k}_1-1)!}{(j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

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$$\begin{aligned}
 & \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{ik}}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j^{sa}-n_{ik}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j^{sa}-1)! \cdot (n_s=n-j_i+l_{k_3}-1)!} \\
 & \frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}-n_{ik}-j_s+1)!} \\
 & \frac{(n_{ik}-n_{is}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}-1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{is}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=l}^{\binom{(\cdot)}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}
 \end{aligned}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{(l_s - l - 1)! \cdot (l - 2)!}{(l_s - j_s - 1)! \cdot (l - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} + j_{sa} - s > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + j_i - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\begin{aligned}
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_{sa} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - 1)!} \cdot (n - j_i)! \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{sa}^{ik} - l_{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + n - n - 1)!}{(n_s + n - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - l - 1)!}{(n - l - 1)! \cdot (j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i - l_{sa} - l_s)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i=j^{sa} + s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - j_{sa} - 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+1}^{()} \sum_{(j_{sa}^{ik}-l)} \sum_{(j_{sa}^{ik}-D-s)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j_i=j^{sa}+s-j_{sa})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{sa}, j_i} = \sum_{k=l}^{l_i+n-D-s} \sum_{(j_s=2)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j_i=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_i - l_s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_s=l_i+n-D-s}^{l_s-l} \sum_{j_{ik}=j_s+l-1}^{l_{ik}-l+1} \sum_{j_{sa}=j_{sa}^{ik}+j_s-j_{sa}}^{l_i-l+1} \sum_{n_{is}=n+l_{ik}-j_s-1}^n \sum_{n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{n_{sa}=n+l_{k_3}-j^{sa}+1}^{(n_{is}+j_s-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_3}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

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$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_i + n - D - s + k)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{()} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_s)} \sum_{(j_i = j^{sa} - j_{sa})}$$

$$\sum_{n_i = n + k}^n \sum_{(n_i - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n_i - j_s - j_{ik} - k_1)}$$

$$\sum_{(n_{sa} = n_{ik} - j^{sa} - k_2)}^{()} \sum_{(n_{sa} = n_{ik} - j^{sa} - k_2)} \sum_{(n_{sa} = n_{ik} - j^{sa} - k_2)}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot k_1 - k_2 - k_3)!}{(n_i - k_1 - k_2 - k_3)! \cdot (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_i \leq l \wedge l_s \leq D - n + 1 \wedge$$

$$D + j_i + s - n - l_i - 1 \leq l \leq l - 1 \wedge$$

$$1 \leq j_s \leq j_s - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$j_s - 1 < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

$$j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa} \quad (j^{sa} = l_{sa} + n - D) \quad \sum_{(j_s=2)}^{(l_{sa}-l+1)} \sum_{(j_s=2)}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_s+1)}^{(n_{is}+j_s-j_i-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n_{sa}-j^{sa}+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(j_s=2)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{ik} - n_{is} - \mathbb{k}_1 - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_i+n}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_1)}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq l \wedge l_i = 0 + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k_1 + k_2 + k_3 \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s \geq s + k \wedge$$

$$k: z = 2 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(\cdot)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_s+s-1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_i}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)!(n_i-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \\
 & \frac{(n_{sa}-n_s-k_3-1)!}{(j_i-n_{sa}-1)!(n_{sa}+j^{sa}-n_s-j_i-k_3)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)!(n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)!(j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)!(j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})!(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)!(n-j_i)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{i_k} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{i_k} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_{i_s} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=s+1}^{l_s+s-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)! \cdot \frac{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}{(l_s - l - 1)! \cdot (l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_s \leq n$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s = l_s \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\}$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l - 1)!}{(l_s - j_i - l + 1)! \cdot (l - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_{sa} - j_{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+l_k+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_s)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{l_s+j_{sa}-l} \sum_{j_{sa}=j_{sa}+1}^{j_{sa}} \sum_{j_i=j_{sa}+s-j_{sa}}^{n} \sum_{l_i=n+\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{n_{is}=n+\mathbb{k}_1-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(n_i-j_s+1)} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

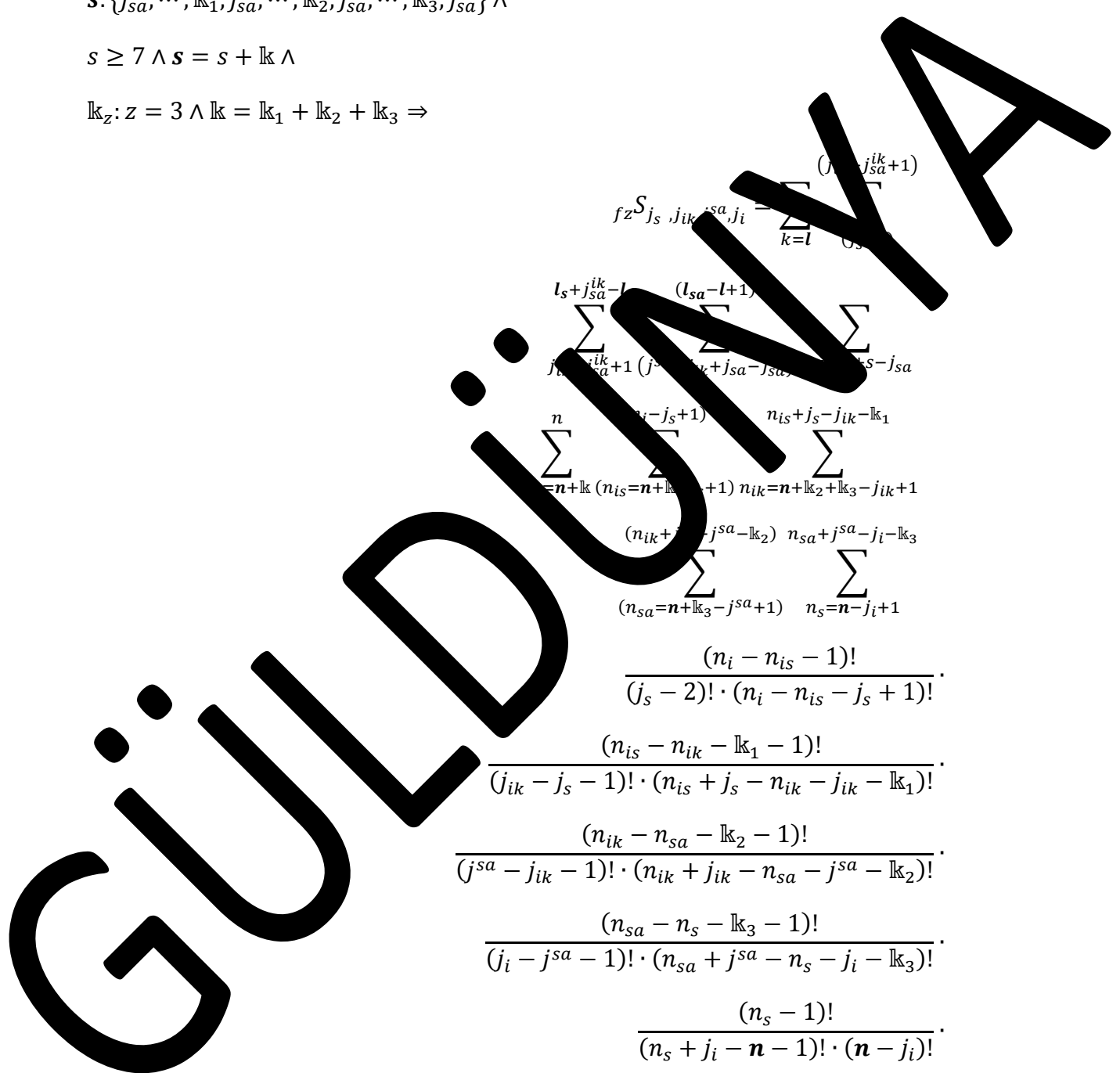
$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \dots \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$



$$\begin{aligned}
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik} = l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa})}^{(l_{sa} - l + 1)} \sum_{(j_{sa} = j_{sa} - j_{sa})}^{(l_s - l + 1)} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n - k)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n + k_3 - j_{ik} + 1)}^{(n_{is} + j_s - j_{ik} - k_1)} \\
 & \sum_{(n_{ik} + j_{sa} - k_2)}^{(n_{ik} + j_{sa} - k_2)} \sum_{(n_{sa} = n - k_3)}^{(n_{sa} = n - k_3)} \sum_{(j_i - k_3)}^{(j_i - k_3)} \\
 & \sum_{(n_s = n + k_3 - j^{sa})}^{(n_s = n + k_3 - j^{sa})} \sum_{(n_s = n - j_i + 1)}^{(n_s = n - j_i + 1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j^{sa}+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\cdot)} \sum_{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq l + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq l_s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa} + j_{ik} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq l < n \wedge l = l_{k_1} + l_{k_2} + l_{k_3} \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, l_{k_1}, j_{sa}^{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s \leq l_s + l_{k_1} \wedge$$

$$l_s = 7 \wedge l_{k_1} = l_{k_2} + l_{k_3} \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)!(n_i-n_{is}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{is}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_{sa}-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j_{sa}-1)!(n_i+j_{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}
 \end{aligned}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\quad)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

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$$\sum_{n_i=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_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{(l_s - l - 1)! \cdot (j_s - 2)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_i > l_{ik} \wedge l_{sa} + j_{sa} - s = l_i \wedge$$

$$D + s - n < l_i \leq D + l_s - n - 1$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\)} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\begin{aligned}
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - l_{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} + j_{sa} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_s - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_i+n-D}^{l_s+s-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(l_s + j_{sa} - l)} \sum_{j_{ik} = j^{sa} + n - D}^{(j_{sa}^{ik} - j_{sa})} \sum_{j_i = j^{sa} + s - j_{sa}}^{(l_s + j_{sa} - l)} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 + k_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l + 1)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_s + 1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(n - l_i)!}{(n - l_i - j_s + 1)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s=2)}^{(j_s-l+1)} \\
 & \sum_{i_{ik}=l_{ik}}^{l_{ik}-l+1} \sum_{(i_{is}=n-l-s+1)}^{(l_i-n-l-s+1)} \\
 & \sum_{n+l_{ik}}^{(n_{is}=n+l_{ik}-j_s+1)} \sum_{n_{ik}=n+l_{ik_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_s+1} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_s}^{j_{ik}+1} \sum_{j_{sa}=l_i+l_{sa}-D-s}^{j_{sa}+1} \sum_{j_i=j^{sa}+s-j_{sa}}^{j_i+1} \sum_{n+l_{ik}+l_{sa}+j_s+1}^n \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{n_{ik}+1} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}^{n_{sa}+1} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}^{n_s+1} \frac{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^l\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z^S j_s, j_{ik}, j_{sa}, j_i = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_s=2}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_{sa}=l_i+n, \dots, D-s)}^{(l_i+j_{sa}-l-s)} \sum_{j_i=j_{sa}+s}^{(i+1)} \sum_{n_i=n}^{(n_{is}=n+1)} \sum_{(n_{ik}=n)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=n_{sa}-j_{sa}+1)}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \sum_{n_s=n-j_i+1}^{(n_s+n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{j_{i+1}=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3+1}^{n_{is}+j_s-k_1} \\
 & \frac{(n_{ik}+j_{ik}-j_{sa}^{ik}-1)! \cdot (n_{sa}+j_{sa}-j_i-k_3)!}{(n_{sa}-k_3-j_{sa}^{ik}-1)! \cdot (j_{i+1})!} \\
 & \frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \\
 & \frac{(n_{is}-n_{is}-k_1-1)!}{(j_{ik}-j_{sa}^{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{sa}-j_{sa}^{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}^{ik}-k_2)!} \\
 & \frac{(n_{sa}-n_s-k_3-1)!}{(j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-k_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}^{ik}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j^{sa}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j^{sa}+1)! \cdot (n_s=n-j_i)!}$$

$$\frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_s-2)! \cdot (n_{is}+j_s-j_{ik}-l_{k_1})!}$$

$$\frac{(n_{ik}-n_s-l_{k_2}-1)!}{(j^{sa}-j_{ik}+1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!}$$

$$\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

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$$\sum_{j_{ik}=l_i+n+j_{sa}^{lk}-D-s}^{l_s+j_{sa}^{lk}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-lk_3}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - 2 \cdot s - lk_1 - lk_2 - lk_3)!}{(n_i - n - lk_1 - lk_2 - lk_3)! \cdot (n + j_{sa} - j_{sa}^{ik} - s)! \cdot (l_s - l - 1)!}$$

$$\frac{(D - s - n + l_i)!}{(D + j_{sa} - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik}^{ik} < j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{ik} + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} - j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} > l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq l_i + l_s + s - n = D$

$D > n < n \wedge l = lk > 0$

$j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} - j_{sa}^{ik} - 1 < j_{sa}^{ik} - 1 \wedge$

$\{j_{sa}^{ik}, \dots, lk_1, j_{sa}^{ik}, \dots, lk_2, j_{sa}^{ik}, \dots, lk_3, j_{sa}^{ik}\} \wedge$

$s \geq 7 \wedge s = s - l_s \wedge$

$lk_2 = s - lk = lk_1 + lk_2 + lk_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n - n_s - 1)!}{(n_{sa} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\frac{\sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - l_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_1)!} \cdot \frac{(n_{ik} - n_{sa} - l_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - l_2)!} \cdot \frac{(n_{sa} - n_{sa} - l_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_3)!} \cdot \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - l_{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_3}$$

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$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_i - l + 1)! \cdot (l_s - j_i - l - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_{sa} - j_{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{ik} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)} \\
 & \sum_{j_{ik} = l_{ik} + n - D}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_i + j_{sa} - s)} \sum_{j_i = l_s + s - l + 1}^{l_{sa} + s - l - j_{sa} + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 1)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik} + 1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{j_{ik}=j_i+j_{sa}-j_{sa}^{ik}}^{\sum_{j_{ik}=j_i+j_{sa}-j_{sa}^{ik}}} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{\sum_{j_s=j_{ik}-j_{sa}^{ik}+1}} \sum_{j_i+l_{sa}-s}^{l_s+s-l} \sum_{j_i+l_{sa}+n+s-D-j_{sa}}^{l_s+s-l} \\
 & \sum_{l_i=n+\mathbb{k}_1}^n \sum_{(n_i=n+\mathbb{k}_1-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

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$$fz^S j_s, j_{ik}, j_{sa}^{ik} = \sum_{j_s=l}^{\dots} \sum_{(j_s=2)}^{\dots} \dots$$

$$\dots \sum_{j_{ik}=l_{ik}}^{\dots} \sum_{(j_{sa}=\dots, n-D)}^{\dots} \sum_{j_i=j_{sa}+s-j_{sa}}^{\dots} \dots$$

$$\dots \sum_{n_i=n}^{\dots} \sum_{(n_i=\dots, 1)}^{\dots} \sum_{l_s+j_s-j_{ik}-k_1}^{\dots} \dots$$

$$\dots \sum_{(n_{is}=\dots, 1)}^{\dots} \sum_{n_{ik}=\dots, j_{ik}+1}^{\dots} \dots$$

$$\dots \sum_{(n_{ik}+j_{ik}-j_{sa}-k_2)}^{\dots} \sum_{n_{sa}+j_{sa}-j_i-k_3}^{\dots} \dots$$

$$\dots \sum_{(n_{sa}=\dots, j_{sa}+1)}^{\dots} \sum_{n_s=\dots, j_i+1}^{\dots} \dots$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l_i}^{(l_s - l + 1)} \sum_{s=2}^k$$

$$\sum_{j_{ik}=l_{ik}+n}^{l_{ik}-l+1} \sum_{n_{sa}=l_s+j_{sa}-l}^{(l_s-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{ik}=n+l_k-j_s+l}^{(n_i-l+1)} \sum_{k=n+l_k+l_2+l_3-j_{ik}+1}^{(n_i-l+1)}$$

$$\sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j^{sa}-l_k)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_{sa}+n-D)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=j_s+1)} \sum_{(n_{ik}=j_s-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n_{ik}+j^{sa}-k_2)}^{(\)} \sum_{(n_{sa}+j^{sa}-j_i-k_3)}$$

$$\frac{(n_i + j_i + j^{sa} - 2 \cdot k_1 - k_2 - k_3)!}{(n_i - k_2 - k_3)! \cdot (n_i + j_i + j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n - 1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - 1 \wedge l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$l \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_{sa}-l+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+k-k_1}^{n_{is}+j_s-k-k_1} \sum_{j_{ik}+1}^{n_{ik}+k-k_1}$$

$$\sum_{(j^{sa}+1)}^{(n_{ik}+j_{ik}-k_2)} \sum_{(n_{sa}+j^{sa}-k_3)}^{n_{sa}+j^{sa}-k_3}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{sa} - n_s - k_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_i}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i-k_1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-k_2)!} \cdot \frac{(n_{sa}-k_3-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-k_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}
 \end{aligned}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k_2+l_k_3-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_k_3-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - l_{k_1})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_{i_s} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a} - j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{i_k}-j_{s_a}^{i_k}+1)}^{()}$$

$$\sum_{j_{i_k}=l_{s_a}+n+j_{s_a}^{i_k}-D-j_{s_a}}^{l_s+j_{s_a}^{i_k}-l} \sum_{(j^{s_a}=j_{i_k}+j_{s_a}-j_{s_a}^{i_k})}^{()} \sum_{j_i=j^{s_a}+s-j_{s_a}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_s \leq n$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

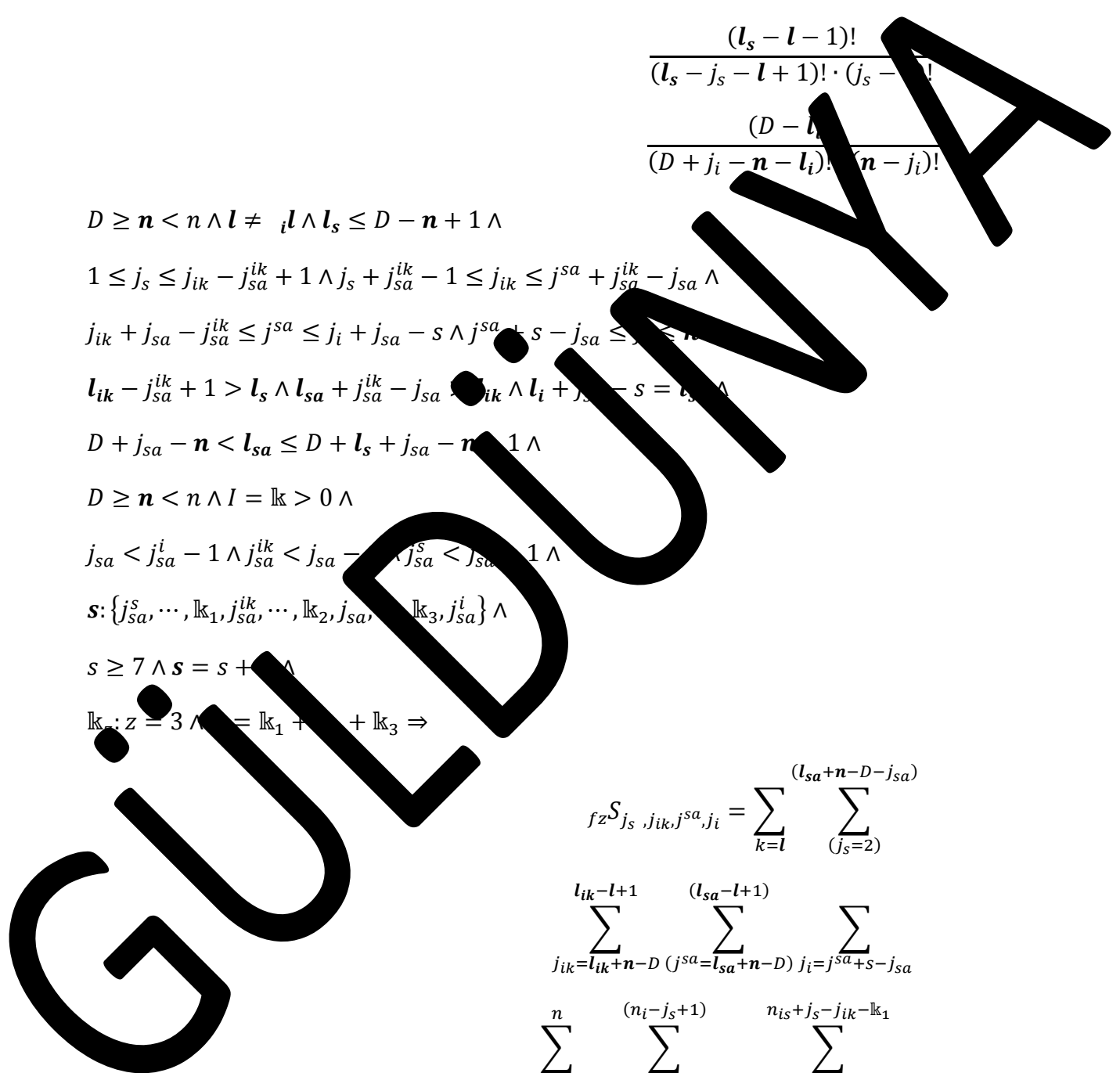
$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - j_{sa}^s < j_{sa}^s - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \dots \wedge$

$\mathbb{k}_z: z = 3 \wedge \dots = \mathbb{k}_1 + \dots + \mathbb{k}_3 \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j^{sa}, j_i}} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)} \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$



$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_s - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l - 1)} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)} \\
 & \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(l_{sa} - l + 1)} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - j^{sa} - 1)! \cdot (j_{ik} - j_s - j^{sa} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - j_{sa}^{ik} - 1)! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}$$

$$\sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j_i=j^{sa}+s-j_{sa})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq l_i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} & \sum_{j_s=2}^{j_s-l+1} \sum_{j_{ik}=l_{ik}-l+1}^{j_{ik}} \sum_{j_i=l_i+n-D}^{j_i} \sum_{j_{sa}=n+k_2+k_3-j_{ik}+1}^{j_{sa}} \sum_{n_{is}=n+k_1-j_s+1}^{n_{is}} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{ik}} \sum_{n_{sa}=n+k_3-j^{sa}+1}^{n_{sa}} \sum_{n_s=n-j_i+1}^{n_s} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{l_s+l-s-l} \sum_{j_{ik}=j_s+l_{sa}-j_{sa}^{ik}}^{l_s+l-s-l} \sum_{j_i=j_s+l_{sa}-s}^{l_s+l-s-l} \sum_{j_i=l_i+n-D}^{l_s+l-s-l} \sum_{n+l_{ik}+l_{sa}^{ik}+j_{sa}^{ik}+j_s+1}^n \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{j_s+1} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}} (n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)! \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D - n - l_i \neq l_i \wedge l_i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l_i \leq l_i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_Z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{(l_s-l+1)} \sum_{j_s=2}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=l_{ik}+1}^{l_{ik}-l+1} \sum_{(j_{sa}=l_{sa}+n)}^{(j_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i+n+k-j_s+1)}^{(n_i+n+k-1)} \sum_{j_{ik}=n+k_2+k_3-j_{ik}+1}^{(n_i+n+k-1)} \sum_{(n_{ik}=n-k-j_{sa}-k_2)}^{(n_{ik}+j_{sa}-j_i-k_3)}$$

$$\sum_{(n_{sa}=n-k_3-j_{sa}+1)}^{(n_{sa}+j_{sa}-j_i-k_3)} \sum_{n_s=n-j_i+1}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_s - l + 1)} \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{()} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{()} \sum_{j_{sa}^{sa} + s - j_{sa}}^{()} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa} - k_1}^{()} \sum_{(j^{sa} = n_{ik} + j_{sa} - k_2 - k_3)}^{()} \sum_{j_{sa} - j_i - k_3}^{()} \frac{(n_i + j_i + j_{sa} - j_{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j_{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$

$D + l_s + s - l_i + 1 \leq l \leq l - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{ik} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^l\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{sa}+n+s-D-j}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j_{sa}-j_i-k_3)!}{(n_{sa}+n+k_3-k_1+1)! \cdot (n_s-n-j_i-k_3)!} \cdot \frac{(n_i-n-k_1-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!}$$

$$\frac{(n_{sa}+n-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_i+j_{sa}-s}} \sum_{l_s+s-l}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+\mathbb{k}-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \sum_{n_s=n_{sa}+j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{sa} - j_i - s)!}$$

$$\frac{(j_s - l - 1)!}{(j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_s - n - l_i)! \cdot (n - j_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$(D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n)$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - 1 > l_{ik} \wedge (j_{sa} - s > l_{sa}) \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1)$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_s - s + 1 \leq l_s \wedge$

$l_i \leq D + s - n$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$l < j_i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$\begin{aligned}
 f_{z^S} S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 &\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s}^{l_s+s-l} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 &\sum_{(n_{ik}+j_{ik}-j^{sa}-l_{k_1}-j_i-l_{k_3})}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_1}-j_i-l_{k_3})} \sum_{(n_{sa}=n+l_{k_3}-j_i-1)}^{(n_{sa}=n+l_{k_3}-j_i-1)} \sum_{n_s=n-j_i+l_{k_3}}^{(n_s=n-j_i+l_{k_3})} \\
 &\frac{(n_s - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 &\frac{(n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \\
 &\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \\
 &\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 &\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 &\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 &\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{sa}-l+1)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{ik}+j_{ik}-j^{sa})}^{(n_{sa}+j_{ik}-j_i-k_3)} \\
 & \sum_{(n_{sa}=n+k_3-j_{ik}+1)}^{(n_{sa}+j_{ik}-j_i-k_3)} \sum_{n_s=n-j_i} \\
 & \frac{(n_i - n_{sa} - 1)!}{(j_s - 2)! \cdot (n_{sa} + j_{ik} - j_i - k_3)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=s}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_1)}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(D - n - l_s > n - n)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z^S j_s, j_{ik}, j^{sa}, j_i = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-l)} \sum_{j_i=l-1}^{l-1} \sum_{(l+s-j_{sa})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i)}^{(j_s-j_i-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_2-j^{sa}+1)}^{(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)}$$

$$\frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{is}-\mathbb{k}_1-1)!}{(j_s-2)! \cdot (n_i+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_{i-sa}^{sa+s-j_{sa}}=1}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+k_2)}^{n_{is}+j_s-k_1} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j^{sa}-j_i-k_1)!}{(n_{sa}+k_3-j_s)! \cdot (n_{ik}-j_i+1)!} \cdot \frac{(n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \\
 & \frac{(n_{is}-k_1-1)!}{(j_{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_s-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 & \frac{(n_{sa}-n_s-k_3-1)!}{(j_s-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j_{sa}^{sa}=j_{sa}+1)} \sum_{j_i=j_{sa}+s-j_{ik}}^{(\cdot)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{lk_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\left((D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge \right.$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} + j_i + j_{sa} - s \wedge j_{sa}^{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} + j_{sa}^{lk} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} + j_i + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_{sa} \wedge$$

$$(D - n - l_i - n) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^l\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=l_i-l+1}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i)}^{(n_i-j_s+\mathbb{k}_1)}$$

$$\frac{(n_{sa}=n+\mathbb{k}-j_s+1) \cdot (n_s+j_s-j_i-\mathbb{k}_3)}{(n_{sa}-j^{sa}+1) \cdot (n_s+j_s-j_i-\mathbb{k}_3)}$$

$$\frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{is}-\mathbb{k}_1-1)!}{(j_s-2)! \cdot (n_s+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}$$

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$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik}=l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j_{sa}=j_{ik} + j_{sa} - j_{sa}^{ik})}^{(l_{sa} - l + 1)} \sum_{j_{sa}^{sa} + s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_{sa})}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+k_2}^{n_{is} + j_s - k_1} \\
 & \frac{(n_{ik} + j_{ik} - j_{sa}^{sa})! \cdot (n_{sa} + j_{sa} - j_i - k_1)!}{(n_{sa} + k_3 - j_{sa}^{sa})! \cdot (n_{sa} - j_i + 1)!} \\
 & \frac{\dots - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_{sa} - j_{sa}^{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa}^{sa} - l_{ik})! \cdot (j_{sa}^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa}^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa}^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j^{sa}+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\cdot)} \sum_{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} + j_{sa} - j_{sa}^{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_{sa} \wedge$$

$$(l_i - s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+j_{sa}^{lk}-j_{sa}^{ik})}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_s-j_{sa}^{lk}+j_{sa}^{ik}-j_i-\mathbb{k}_1)}^{(n_{is}+j_s-j_{sa}^{lk}-\mathbb{k}_1)}$$

$$\frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{is}-\mathbb{k}_1-1)!}{(n_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j^{sa}-j_i-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{lk}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{lk}+1)!}$$

$$\frac{(l_{sa}+j_{sa}^{lk}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{lk}-j_{ik}-j_{sa})!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \sum_{j_{ik}=j_s + j_{sa}^{ik} - 1}^{(j_{sa}=j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_{sa}^{sa} + s - j_{sa}}^{(j_{sa}^{sa} + s - j_{sa})} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n_{is} + j_s - k_1}^{(n_{ik}=n_{is} + j_s - k_1)} \sum_{(j_{sa}=n_{ik} + j_s - k_2 - k_3)}^{(j_{sa} - k_2 - k_3)} \sum_{(j_{sa} - j_i - k_3)}^{(j_{sa} - j_i - k_3)} \frac{(n_i + j_i + j_{sa} - j_{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j_{sa} - 2 \cdot s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_i \neq l \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa}^{ik} - j_{sa} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & D + s - n < l_i \leq D + l_s + s - n - 1) \vee \\ & ((D \geq n < n \wedge l_i \neq l \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_i - s + 1 > l_s \wedge \\ & D + s - n < l_i \leq D + l_s + s - n - 1) \wedge \\ & D \geq n < n \wedge l_i = k > 0 \wedge \end{aligned}$$

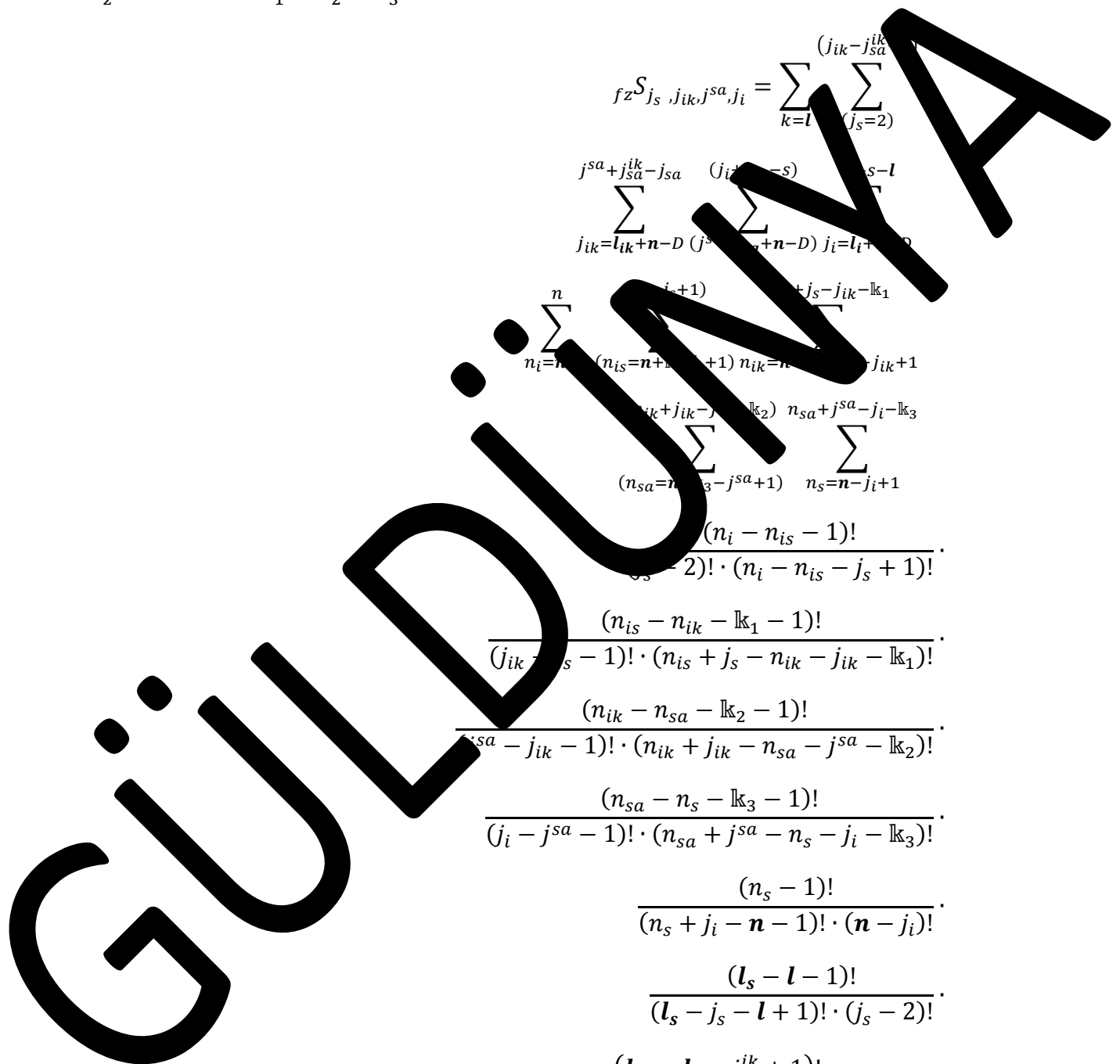
$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_{ik}=l_{ik}+n-D}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_i=l_i-s)}^{(j_i=l_i-s)} \sum_{j_i=l_i+l}^{(j_i=l_i+l)} \sum_{n_i=n}^{(n_i=n+l_i+1)} \sum_{(n_{is}=n+l_{is}+1)}^{(n_{is}=n+l_{is}+1)} \sum_{(n_{ik}=n)}^{(n_{ik}=n+l_{ik}+1)} \sum_{(n_{sa}=n-l_{sa}-j_{sa}^{ik})}^{(n_{sa}=n-l_{sa}-j_{sa}^{ik})} \sum_{n_s=n-j_i+1}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$



$$\begin{aligned}
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{j_s=2}^{l_s - l + 1} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{j^{sa}=l_{sa}}^{(l_{sa}-l+1)} \sum_{j_i=l_s-l+1}^{l_s-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{n_{is}=n_{is}+j_s-j_{ik}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{ik}+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
 & \frac{(n_{ik} - j^{sa} - k_2)!}{(n_{ik} - j_i - k_3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜŞMÜŞA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{(l_s+s=l_i+n-D)}^{(\quad)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-k_1)} \sum_{(n_{sa}=n_{ik}+j_s-k_2)} \sum_{(n_{sa}-k_2)}^{(n_i-j_i-k_3)} \frac{(n_i + j_i + j_{sa} - j_s - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j_s - 2 \cdot s)!} \frac{(l_s - l - 1)!}{(l_s + j_s - l + 1)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_i \neq l \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_i - j_{sa}^{ik} + 1 > l_s \wedge l_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & D + s - n < l_i \leq D + l_s + s - n - 1) \vee \\ & (D \geq n < n \wedge l_i \neq l \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_i - s + 1 > l_s \wedge \\ & D + s - n < l_i \leq D + l_s + s - n - 1) \wedge \\ & D \geq n < n \wedge l_i = k > 0 \wedge \end{aligned}$$

$$j_{sa} < j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^l\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z^S j_s, j_{ik}, j_{sa}, j_i = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_s=2}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_{ik}=l_{ik}+n-D}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_i=l_i+1}^{(l_i+n+j_s-1)} \sum_{n_i=n}^n \frac{(n_{is}=n+1) \cdot (n_{ik}=n+j_{ik}+1)}{(n_{sa}=n_{ik}-j_{sa}+1) \cdot (n_s=n-j_i+1)} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\begin{aligned}
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D)}^{(l_s + j_{sa} - l)} \sum_{(j_s=2)}^{l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik}-1)}^{n_{is}+j_s-j_{ik}-1} \\
 & \sum_{(n_{ik}+j_{ik}-j^{sa}-k_2)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(j_i-k_3)}^{j_i-k_3} \\
 & \sum_{(n_s=n+k_3-j^{sa}-1)}^{(n_s=n+k_3-j^{sa}-1)} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GULDENWA

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_{sa})}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+k_2)}^{n_{is}+j_s-k_1} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j^{sa}-j_i-k_1)!}{(n_{sa}+k_3-j_{sa})! \cdot (n_{ik}+j_{ik}-j_i-k_1)!} \\
 & \frac{(n_{is}-k_1-1)!}{(j_{ik}-k_1-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}+j_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{sa}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 & \frac{(n_{sa}-n_s-k_3-1)!}{(j^{sa}-j_{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

GÜLDÜZMAYA

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\cdot)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_1)}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\left((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge \right.$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} + j_{sa}^{lk} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_{sa}=l_{sa}-D)}^{(l_{sa}-l+1)} \sum_{j_i=n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n_{is}+j_s-j_{ik}}^{n_{is}+j_s-j_{ik}}$$

$$\frac{(n_{ik}-j_{sa}-k_2-1)!}{(n_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-k_2)!}$$

$$\frac{(n_{sa}-n_s-k_3-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-k_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)} \\
 & \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - l} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(l_{sa} - l + 1)} \sum_{j_{i_s} = j_{sa} + s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{i_s} = n + k - j_s)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 + k_3}^{n_{i_s} + j_s - k_1} \\
 & \sum_{(n_{sa} = k_3 - j_{sa} + 1)}^{(n_{ik} + j_{ik} - j_{sa} - k_1)} \sum_{(n_{sa} + j_{sa} - j_i - k_2)}^{(n_{sa} + j_{sa} - j_i - k_2)} \\
 & \frac{(n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_{i_s} - j_s + 1)!} \\
 & \frac{(n_{i_s} - n_{i_s} - k_1 - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDENYA

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik}=l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik})}^{(l_{sa} - l + 1)} \sum_{j_{sa}^{sa} = j_{sa} - j_{sa}^{ik}}^{l_i - l + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_{sa}^{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2}^{n_{is} + j_s - k_1} \\
 & \frac{(n_{ik} + j_{ik} - j_{sa}^{ik})! \cdot (n_{sa} + j_{sa} - j_i - 1)!}{(n_{sa} + k_3 - j_{sa}^{ik})! \cdot (n_{sa} - j_i + 1)!} \\
 & \frac{(n_{is} - k_1 - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_{sa}^{sa} - j_{sa}^{ik} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

GÜLDÜZMAYA

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j_{sa}+s-1}^{(\cdot)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k_1}}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{(\cdot)} \sum_{(n_{sa}+j_{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j_{sa}^{ik} - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (j_i + j_{sa} - s - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\left((D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge \right.$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} + j_{sa} - j_{sa}^{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j_{sa}=n-D)}^{(l_{sa}-l+1)} \sum_{j_i=n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n-j_s+1}^{n_{is}+j_s-n}$$

$$\sum_{(n_{ik}=n-k-j_{sa})}^{(n_{ik}=n-k-j_{sa})} \sum_{(n_{sa}=n-k-j_{sa})}^{(n_{sa}=n-k-j_{sa})} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - k_1 - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(l_{sa} - l + 1)} \sum_{j_{sa}^{sa} = j_s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2}^{n_{is} + j_s - k_1} \\
 & \frac{(n_{ik} + j_{ik} - j_{sa}^{ik})! \cdot (n_{sa} + j^{sa} - j_i - k_1)!}{(n_{sa} + k_3 - j_s - k_2)! \cdot (n_{sa} - j_i + 1)!} \\
 & \frac{(n_{is} - k_1 - 1)! \cdot (n_{is} - j_s + 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - k_1 - 1)!}{(j_{ik} - k_1 - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_s - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{ik}}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_1)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_{ik}}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (j_i - j_{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \vee$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D > n \leq n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

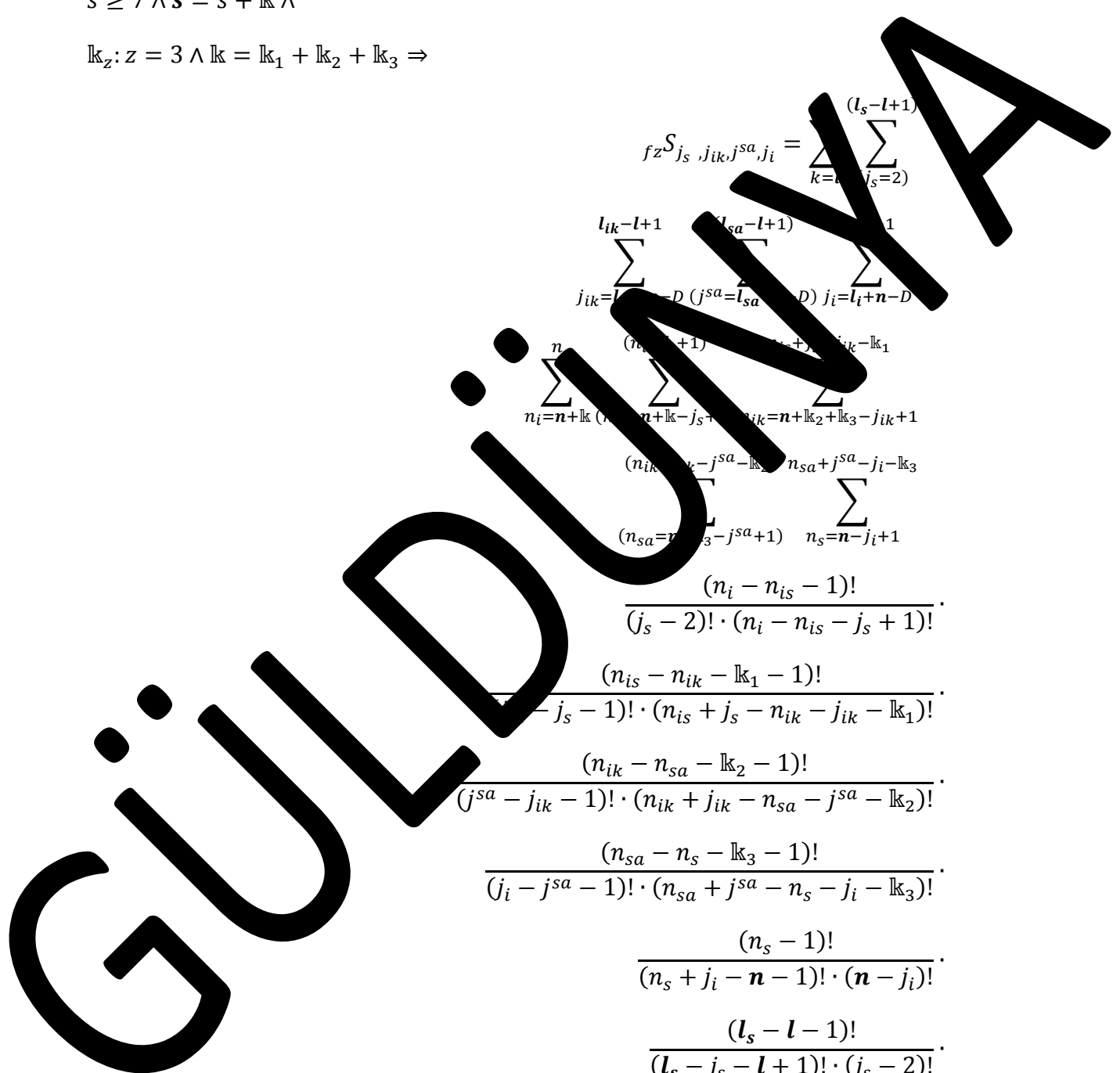
$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{j_s=2}^{(l_s-l+1)} \sum_{j_{ik}=l}^{l_{ik}-l+1} \sum_{(j_{sa}=l_{sa}-D)}^{(j_{sa}=l_{sa}-D)} \sum_{j_i=l_i+n-D}^{(j_i=l_i+n-D)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_s+1)}^{(n_{ik}=n+\mathbb{k}-j_s+1)} \sum_{(j_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(j_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)} \sum_{(n_{sa}=n+\mathbb{k}_3-j_{sa}+1)}^{(n_{sa}=n+\mathbb{k}_3-j_{sa}+1)} \sum_{n_s=n-j_i+1}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$



$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+...)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}^{ik}-j_s)}^{()} \sum_{(j_i=j_s+j_{sa}^{ik}-j_{sa})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=j_s-j_{ik}-k_1)}^{(n_i-j_s+1)} n_{ik}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}^{(n_i-j_s+1)}-j^{sa}-k_2)}^{()} \sum_{(n_{sa}+j^{sa}-j_i-k_3)}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot k_1 - k_2 - k_3)!}{(n_i - k_1 - k_2 - k_3)! \cdot (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_i = l \wedge l_i = D + s - l \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - k_1 + 1 = j_s + j_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_i < j_i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^l\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^n \sum_{l=1}^{(j_s)} \sum_{j_i=l+1}^{(j_s)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(j_s)} \sum_{(j^{sa}=j_{sa})}^{(j_s)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2+j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n+k_3-j^{sa}}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - j_{ik} - k_1 + 1)!}{(j_i - 2)! \cdot (n_{ik} - k_1 + 1)!}$$

$$\frac{(n_{sa} - j^{sa} - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - j^{sa} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i + j_{sa} - j_i - l_{sa})! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^n \sum_{l=1}^{(j_s)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(j_s)} \sum_{(j^{sa}=j_{sa})}^{(j_s)} \sum_{j_i=s}^{(j_s)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{(j_s)}$$

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\binom{()}{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{\binom{()}{j_s=1}}^{l_i - l_i + 1}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{\binom{()}{j^{sa}=j_{sa}}} \sum_{j_i=l_i+n-D}^{l_i - l_i + 1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\binom{()}{n_s=n-j_i+1}}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_i + j_{sa} - l_s - s)!}{(l_i + j_{sa} - j_i - l_{sa})! \cdot (j_i - s)!}$$

$$\frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_s=1)}^{(n)}$$

$$\sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}^{(n)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(n)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(n)}$$

$$\frac{(n - j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D > n \wedge l = i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{()} \sum_{j_{sa}=1}^{()} \sum_{j_i=s}^{l_i - i + 1} \sum_{j_{ik}=j_{sa}^{ik} (j_{sa}^{ik} = j_{sa} - s)} \sum_{j_i=s}^{(n_i - j_{ik} - k_1 + 1)} \sum_{j_{sa}=n_{sa} - k_2 - j_{ik} + 1}^{(n_{ik} = n_{sa} + k_3 - j_{ik} + 1)} \sum_{j_i=k_3}^{(n_{ik} + j_{sa} - k_2)} \sum_{j_i=k_3}^{(n_s - j_i + 1)} \frac{(n_i - n_{ik} - k_1 - 1)!}{(n_i - 2)! \cdot (n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{j_{sa}=1}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik} (j_{sa}^{ik} = j_{sa})} \sum_{j_i=s}^{()} \sum_{j_i=s}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\cdot)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{(D - l_i)}{(D + s - l_i)! (n - s)!}$$

$D \geq n < n \wedge l = l \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + s - j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa}^{ik} \leq j_i - j_{sa}^{ik} \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa}^{ik} - j_{sa} = l_{sa}$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^{i-1}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^n \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - l_{sa})!} \cdot \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \sum_{k=i}^{()} \sum_{l_i}^{()} \sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j^{sa}=j_{sa})}^{()} \sum_{j_i=s}^{()} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{()} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$n_i \geq n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 \wedge l_i = l_i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

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$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)} \dots$$

$$\sum_{j_{ik}=j}^{(\cdot)} \sum_{(j_{sa}=j_i-s)}^{(\cdot)} \sum_{j_i=s}^{(\cdot)} \dots$$

$$\sum_{n_i=n+\mathbb{k}}^{(\cdot)} \sum_{(n_i=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(\cdot)} \dots$$

$$\sum_{n_{ik}+j_{sa}-\mathbb{k}_2}^{(\cdot)} \sum_{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}^{(\cdot)} \dots$$

$$\sum_{n_{sa}=j_{sa}+1}^{(\cdot)} \sum_{(n_s=n-j_i+1)}^{(\cdot)} \dots$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s} \sum_{n_i=n+\mathbb{k}} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j_i-j-\mathbb{k}_3)} \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{sa} - j - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_s - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_i + j - s = j_{sa} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{ik} < j_{sa} - 1 \wedge j_s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$

$s \geq 7 \wedge s = s + \dots \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\dots} \sum_{(j_s=1)}^{\dots}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=n+\mathbb{k}} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}$$

$$\sum_{n_i=n+\mathbb{k}} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}$$

$$\begin{aligned}
& \sum_{n_{sa}=n+k_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_3)} \\
& \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_1 - 1)!} \cdot \\
& \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - k_3 - 1)!} \cdot \\
& \frac{(n_s - n - 1)! \cdot (n - j_i)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_i - l_s - k_1 + 1)!}{(l_{ik} - j_{ik} - l_s - k_1 + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
& \frac{(D - l_i)!}{(n + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=i}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \\
& \sum_{j_{ik}=j_{sa}^{ik}}^{(\quad)} \sum_{(j^{sa}=j_{sa})}^{(\quad)} \sum_{j_i=s}^{(\quad)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{(\quad)} \\
& \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}^{(\quad)} \sum_{(n_s=n_{sa}+j^{sa}-j_i-k_3)}^{(\quad)} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=1}^i \sum_{(j_s=1)}^i$$

$$l_s - i + 1 \sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_{sa}=j_{ik}+1)} \sum_{(j_{sa}^{ik})} j_i = j_{sa} + s - j_{sa}$$

$$(n_i - j_{ik} - k_1 + 1)$$

$$\sum_{n_{ik}+k} (n_{ik}=n+k_2+k_3-j_{ik}+1)$$

$$n_{ik}+j_{ik}-j_{sa}-k_2 (n_{sa}+j_{sa}-j_i-k_3)$$

$$\sum_{n_{sa}=n+k_3-j_{sa}+1} \sum_{(n_s=n-j_i+1)}$$

$$(n_i - n_{ik} - k_1 - 1)!$$

$$(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!$$

$$(n_{ik} - n_{sa} - k_2 - 1)!$$

$$(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!$$

$$(n_{sa} - n_s - k_3 - 1)!$$

$$(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!$$

$$(n_s - 1)!$$

$$(n_s + j_i - n - 1)! \cdot (n - j_i)!$$

$$(l_{ik} - l_s - j_{sa}^{ik} + 1)!$$

$$(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!$$

$$(D - l_i)!$$

$$(D + j_i - n - l_i)! \cdot (n - j_i)!$$

$$\sum_{k=i}^{()} \sum_{l(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j^{sa}=j_{sa})}^{()} \sum_{j_i}^{()}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i-l-k_1+1)}^{()}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}^{()} \sum_{(n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (j_i + j_{sa} - 2 \cdot s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} - 1 \leq j_s \leq j^{sa} - j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{ik}, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = k \wedge$$

$$k_2: \dots \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=i}^{()} \sum_{l(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa}-i^{l+1})} \sum_{(j^{sa}=j_{sa})}^{l_i-i^{l+1}} \sum_{j_i=s}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \\
 & \sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - j_i - n - j_i - 1)!}{(n_s - j_i - n - j_i - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_i - l_{sa} - s)!}{(l_{sa} + l_i - j_i - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{\binom{D}{k}} \sum_{j_s=1}^{\binom{D}{j_s}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{\binom{D}{j^{sa}}} \sum_{j_i=s}^{\binom{D}{j_i}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{\binom{D}{n_{ik}}} \\
 & \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{\binom{D}{n_{sa}}} \\
 & \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!}
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$j_{ik}^{sa}, j_{ik}, j_{sa}^{sa} = \sum_{k=l}^n \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{sa}-i+1)} \sum_{(j^{sa}=j_{sa})} l_{i-i+1} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{(j_s)} \sum_{j_{ik}=j_s} \sum_{j_{sa}=j_{sa}} \sum_{j_i=s} \sum_{n_i=n}^n \sum_{n_{ik}=n_i - j_{ik} - k_1 + 1} (n_{ik} + j_{ik} - k_2 - k_3)! \cdot (n_s = n_{sa} + j^{sa} - j_i - k_3)! \cdot (n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)! \cdot (n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)! \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_i \leq l + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ls} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - l_s + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_s - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=i}^{\dots} \sum_{(j_s=1)}^{(\dots)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i^{l+1}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\dots)} \sum_{j_i=j^{sa}+s-}^{l_i-i^{l+1}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2+\dots-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)}$$

$$\sum_{n_{ik}+j_{ik}-j^{sa}-k_2} \dots \sum_{(j^{sa}-k_3)}$$

$$\sum_{n_{sa}=n+k_3-j^{sa}} \dots \sum_{(n_s=n-j_i+1)}$$

$$\frac{\dots}{(n_i - 2)! \dots (n_{ik} + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_i + j_{ik} - a - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - \dots - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_i + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^{\dots} \sum_{(j_s=1)}^{(\dots)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\dots)} \sum_{j_i=s}$$

GÜLDENWA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\cdot)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(\cdot)}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{(D - l_i)}{(D + s - l_i)! (n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - j_{sa}^{ik} = l_{sa}$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\cdot} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i^{l+1}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=s}^{l_i-i^{l+1}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\begin{aligned}
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik})!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - j_{sa}^{ik})! \cdot (j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} - j_{sa}^{ik})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=i}^n \sum_{j_s=1}^{(\cdot)} \\
& \sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\cdot)} \sum_{j_i=s} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\cdot)} \\
& \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(\cdot)} \\
& \frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \\
& \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l = \sum_{i=1}^n l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} & f_z S_{j_{sa}^{ik}, j_{sa}^s, j_{sa}^i} \\ & \sum_{k=1}^{\binom{D}{k}} \sum_{l=1}^{\binom{D-k}{l}} \\ & \sum_{j_{sa}^{ik}}^{l_{ik} - i^{l+1}} \sum_{j_{sa}^s}^{(l_{sa} - i^{l+1})} \sum_{j_{sa}^i}^{s - j_{sa}} \\ & \sum_{n_{ik} = i - k}^n \sum_{n_{sa} = n + k_2 + k_3 - j_{ik} + 1}^{(n_i - j_{ik} - k_1 + 1)} \\ & \sum_{n_{sa} = n + k_3 - j_{sa} + 1}^{j_{sa} - k_2} \sum_{n_s = n - j_i + 1}^{(n_{sa} + j_{sa} - j_i - k_3)} \\ & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\ & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\ & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\ & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$\sum_{k=i}^{()} \sum_{l(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j^{sa}=j_{sa})}^{()} \sum_{j_i}^{()}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i-l-k_1+1)}^{()}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}^{()} \sum_{(n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (j_i + j_{sa} - 2 \cdot s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} - 1 \leq j_s \leq j^{sa} - j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_{sa} - j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{ik}, k_1, j_{sa}^{ik}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = k \wedge$$

$$k_2: \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=i}^{()} \sum_{l(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i+1} \sum_{(j^{sa}=j_{sa})}^{(l_{sa}-i+1)} \sum_{j_i=s}^{l_i-i+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \\
 & \sum_{n_{sa}=n+l_{k_3}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_3})} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \\
 & \frac{(n_s - j_i - n - l_s - 1)!}{(n_s - j_i - n - l_s - 1)!} \cdot \\
 & \frac{(l_{ik} - j_{sa} - j^{sa} + 1)!}{(l_{ik} - j_{sa} - l_s + 1)! \cdot (j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} - j_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{()} \sum_{j_i=s}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \\
 & \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i-l_{k_3})}^{()}
 \end{aligned}$$

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$$\frac{(n_i + j_i + j_{sa} - j^{sa} - 2 \cdot s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_i + j_{sa} - j^{sa} - 2 \cdot s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

GÜLDÜNYA

DİZİN

B

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.1.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.1.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.2.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.2.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.1.1/230-231

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.1.1/187-188

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.2.1/230-231

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.2.1/187-188

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.1/230-231

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.3.1/187-188

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.4.1.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.4.1.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.4.2.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.4.2.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.4.3.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.4.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu

simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.1.1/233

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.1.1/190

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.2.1/233

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.2.1/190

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.3.1/233

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.3.1/190

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.4.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.4.1/190

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.4.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.6.2.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.6.2.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu

bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.6.3.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.6.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin durumuna bağlı

tek kalan simetrik olasılık,
2.3.3.1.1.1.1.1/190

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.1.1/80-81

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/165

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin durumuna bağlı

tek kalan simetrik olasılık,
2.3.3.1.1.2.1/118

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.2.1/80-81

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.2.1/165

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin durumuna bağlı

tek kalan simetrik olasılık,
2.3.3.1.1.3.1/118

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.3.1/80-81

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.3.1/165

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.1.1.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.1.1.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.1.2.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.1.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.1.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.1.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.2.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.2.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.2.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.2.2.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.2.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.2.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.2.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.2.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.2.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.4.1.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.4.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.4.2.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.4.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.4.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.4.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.6.1.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.6.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.6.2.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.6.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.6.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.6.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.7.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.7.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.7.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.7.2.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.7.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.7.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.2.7.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.2.7.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.2.7.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrisinin ilk
ve herhangi bir durumunun bulunabileceği
olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.1.1.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.1.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.1.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin ilk ve herhangi bir durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.1.2.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.1.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrisinin ilk ve herhangi bir durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.1.3.1.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.1.3.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.1.3.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
simetrisinin ilk ve herhangi bir durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.2.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.2.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.2.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımsız simetrisinin ilk ve herhangi bir
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.2.2.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.2.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.2.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrisinin ilk ve herhangi bir
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.2.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.2.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrisinin
herhangi iki durumuna bağlı

- tek kalan simetrik olasılık, 2.3.3.1.4.1.1.1/4
- tek kalan düzgün simetrik olasılık, 2.3.3.2.4.1.1.1/3-4
- tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.4.1.1.1/5
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin herhangi iki durumuna bağlı
- tek kalan simetrik olasılık, 2.3.3.1.4.1.2.1/4
- tek kalan düzgün simetrik olasılık, 2.3.3.2.4.1.2.1/3-4
- tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.4.1.2.1/5
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin herhangi iki durumuna bağlı
- tek kalan simetrik olasılık, 2.3.3.1.4.1.3.1/4
- tek kalan düzgün simetrik olasılık, 2.3.3.2.4.1.3.1/3-4
- tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.4.1.3.1/5
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
- tek kalan simetrik olasılık, 2.3.3.1.4.1.1.1/839-840
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
- tek kalan simetrik olasılık, 2.3.3.1.4.1.2.1/839-840
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
- tek kalan simetrik olasılık, 2.3.3.1.4.1.3.1/839-840
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
- tek kalan simetrik olasılık, 2.3.3.1.5.1.1.1/5
- tek kalan düzgün simetrik olasılık, 2.3.3.2.5.1.1.1/4
- tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.1.1.1/7
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
- tek kalan simetrik olasılık, 2.3.3.1.5.1.2.1/5
- tek kalan düzgün simetrik olasılık, 2.3.3.2.5.1.2.1/4
- tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.1.2.1/7
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
- tek kalan simetrik olasılık, 2.3.3.1.5.1.3.1/5
- tek kalan düzgün simetrik olasılık, 2.3.3.2.5.1.3.1/4
- tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.1.3.1/7
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
- tek kalan simetrik olasılık, 2.3.3.1.5.2.1.1/6
- tek kalan düzgün simetrik olasılık, 2.3.3.2.5.2.1.1/3-4
- tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.2.1.1/10
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
- tek kalan simetrik olasılık, 2.3.3.1.5.2.2.1/6
- tek kalan düzgün simetrik olasılık, 2.3.3.2.5.2.2.1/3-4
- tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.2.2.1/10
- Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
- tek kalan simetrik olasılık, 2.3.3.1.5.2.3.1/5
- tek kalan düzgün simetrik olasılık, 2.3.3.2.5.2.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.2.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.1.1.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.1.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.1.2.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.1.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.1.3.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.1.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.2.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.2.2.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.2.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki

durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.2.3.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.2.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.1.1.1/4

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.1.2.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.1.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.2.1.1/6

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.2.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.2.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.2.2.1/6

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.2.2.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.2.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.2.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.2.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.4.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.4.1.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.4.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımsız simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.4.2.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.4.2.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.4.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.4.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.4.3.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.4.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.6.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.6.1.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.6.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımsız simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.6.2.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.6.2.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.6.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.6.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.6.3.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.6.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.7.1.1/6

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.7.1.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.7.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
bağımsız simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.7.2.1/6

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.7.2.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.7.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.7.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.7.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.7.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrisinin ilk
herhangi bir ve son durumunun
bulunabileceği olaylara göre herhangi bir
ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.1.1.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.1.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.1.2.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.1.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.1.3.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.1.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.2.1.1/11

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.2.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımsız simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.2.2.1/11

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.2.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.2.3.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.2.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.4.1.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.4.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımsız simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.4.2.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.4.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.4.3.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.4.3.1/11

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.6.1.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.6.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımsız simetrisinin ilk herhangi bir ve son

durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.6.2.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.6.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.6.3.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.6.3.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.7.1.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.7.2.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.7.3.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.7.1.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.7.1.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.1.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.7.1.2.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.7.1.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.1.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.7.1.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.7.1.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.1.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.7.2.1.1/7

tek kalan düzgün simetrik olasılık,
2.3.3.2.7.2.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.7.2.2.1/7

tek kalan düzgün simetrik olasılık,
2.3.3.2.7.2.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.7.2.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.7.2.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.4.1.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.4.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.4.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.4.2.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.4.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.4.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.4.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.4.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.4.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.6.1.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.6.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.6.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.6.2.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.6.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.6.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.6.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.6.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.6.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.7.1/7

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.7.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.7.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.7.2.1/7

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.7.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.7.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.7.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.7.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.7.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.1.1.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.1.1.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı tek kalan simetrik olasılık, 2.3.3.1.10.1.2.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.1.2.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı tek kalan simetrik olasılık, 2.3.3.1.10.1.3.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.1.3.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı tek kalan simetrik olasılık, 2.3.3.1.10.2.1.1/15

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.2.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı tek kalan simetrik olasılık, 2.3.3.1.10.2.2.1/15-16

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.2.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı tek kalan simetrik olasılık, 2.3.3.1.10.2.3.1/9-10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.2.3.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi iki ve son

durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı tek kalan simetrik olasılık, 2.3.3.1.10.4.1.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.4.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı tek kalan simetrik olasılık, 2.3.3.1.10.4.2.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.4.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı tek kalan simetrik olasılık, 2.3.3.1.10.4.3.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.4.3.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı tek kalan simetrik olasılık, 2.3.3.1.10.6.1.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.6.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı tek kalan simetrik olasılık, 2.3.3.1.10.6.2.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.6.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı tek kalan simetrik olasılık, 2.3.3.1.10.6.3.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.6.3.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.7.1.1/15-16

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.7.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.7.2.1/15-16

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.7.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.7.3.1/9-10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.7.3.1/9-10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.1.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.1.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.1.2.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.1.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son

durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.1.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.1.3.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.1.1/17-18

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.2.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.3.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.2.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.3.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.6.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.6.2.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.6.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.3.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.7.1.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son

durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.7.2.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.7.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.3.1/10-11

VDOİHİ’de Olasılık ve İhtimal konularının tanım ve eşitlikleri verilmektedir. Ayrıca VDOİHİ’de olasılık ve ihtimalin uygulama alanlarına da yer verilmektedir. VDOİHİ konu anlatım ciltleri ve soru, problem ve ispat çözümlerinden oluşmaktadır. Bu cilt bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz olasılık dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu hariç dağılımın başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımın aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılığın, tanım ve eşitliklerinden oluşmaktadır.

VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrik ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık kitabında, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu hariç dağılımın başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımın aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılığın, tanım ve eşitlikleri verilmektedir.

VDOİHİ’nin diğer ciltlerinde olduğu gibi bu ciltte de verilen ana eşitlikler, olasılık tablolarından elde edilen verilerle üretilmiştir. Diğer eşitlikler ise ana eşitliklerden teorik yöntemle üretilmiştir. Eşitlik ve tanımların üretilmesinde diğer kaynak kullanılmamıştır.